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ORIGINAL ARTICLES.

INEBRIETY.*

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It is hardly necessary to state that this subject needs more than a passing notice. The drink problem of this country is of vast proportions. One million of arrests for drunkenness in the United States during the period of one year, with all its resulting misery and expense, is a matter well worthy the attention of the public. There is probably no question to-day before the peoples of all civilized nations, that is receiving so much attention as that of inebriety.

No matter how we look at the subject, whether as a source of great revenue to the state, as a political factor, as a great moral question or as an agent for the ultimate destruction of the physical and psychical organization of man, it is rapidly attracting the best thought of the thinking men and women of the world. States are adopting stringent rules. Norway is already leading the van with its national regulations. Christianity is uttering its most fervent appeals; philanthropists, philosophers and statesmen are racking their brains for a proper remedy; and even princes and potentates of the Eastern world are seriously considering the subject in all its aspects.

A subject so far-reaching and of such vast importance, a subject that has engaged the attention of the civilized world for ages; a problem so hard to solve, a problem so vital to our social fabric, a problem which involves the very life of the nation, a problem which has for its foundation the health, happiness and well-being of the individual, must of necessity deeply interest the medical fraternity of this country. The very nature and make-up of the medical mind, and the physician's duty in regard to preventive medicine and general philanthropy must naturally fit him for this work.

Already many of the best medical men in the nation have come prominently to the front in trying to evolve from their knowledge and experience a remedy for this great evil—an incubus which hangs like a pall over the human race, eclipsing all other evils combined.

In treating a social evil of this magnitude it is first necessary to understand fully its character and causation; and I regret that the time allowed will only admit of the briefest reference, and of the more cardinal points being given.

The physician in treating his patient first tries to get a correct knowledge of his case; in other words he must make a correct diagnosis. So it is with the subject before us; unless we get a clear understanding of the subject and reach correct conclusions, we shall go along groping in the dark, and no further progress will be made toward solving the problem.

Without further comment or argument we will state that it is pretty generally conceded now by the scientific world that

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INEBRIETY is a disease. By this statement we do not mean to say that every one who takes a drink, but who can control or stop it, and does so; or that he who may even take too much under peculiarly tempting circumstances, or to drown sorrow and the like, (if he has no morbid desire or for taste for it), should be called *an inebriate.* So the alienist reasons when he says that every apparently suicidal act is not alone positive evidence that the person committing the act was mentally deranged. So we might reason in regard to the taking of chloroform, chloral, opium and the like, as remedies in disease, notwithstanding the bad effects to which they too often lead. It is only where the imbibation of these articles becomes a fixed and uncontrollable habit with the will power weakened or gone, that we recognize disease.

In treating of organized life, every deviation from a normal or healthy standard must be considered in the light of disease. This fact is recognized in the vegetable as well as the animal kingdom. No one is so familiar with this fact as the horticulturist, the agriculturist, or the breeder of fancy stock. So pauperism and the crime habit must be looked upon and treated as disease in the proper acceptation of the term; and until these facts are recognized and the proper remedies applied in accordance with rational and proved science we shall continue to be cursed with these unnecessary and remediable evils. Inebriety, properly so called, is a disease; and as such, is known by the same morbid phenomena, and is governed by the same pathological laws as other diseases are known and governed.

It is a psychosis; a species of insanity. It is a disease of the brain affecting the mind, in which the predominant and characteristic symptom is a weakening of the will-power and the mental faculties, hence a form of dementia. Not only this, but it is a *disease of the entire nervous and physical organization of the man*; no tissue, no cell escapes; all is involved in one common ruin. These facts are pretty generally conceded by the best men in the medical profession in this country and in Europe. As it is a disease we must deal with it as such, even as other diseases are considered, in regard to causation, treatment and prevention.

Causation: The causes of inebriety may be indirect or predisposing, and direct or exciting.

Of the indirect or predisposing causes, chiefest of all is that of heredity. We may quibble all we like over the term heredity—that a man is not born insane, or an inebriate, or a genius, or a criminal, and the like—but we *do* know, that birth *does* take place with these tendencies.

By heredity we do not mean to say that the child *will* of *necessity* inherit the *peculiar* disease or diseases of the parents, or that the child will *surely* turn ou at vagabond because the parents belong to the defective classes; for we frequently see children born of diseased parents, parents with marked physical, mental and normal defects, who under proper environment grow up to excellent manhood, who go through life perfect specimens of temperance, sobriety and moral integrity, but we tremble with uncertainty when we learn the history of these cases, for we know for a *certainty* that the offspring is *always* born with these tendencies strongly marked.

Environment often "makes the man or damns the child." This reënforces heredity, and by these two great laws health as well as disease is governed. By these processes nature makes her selections and moulds her atoms into things of physical, mental and moral beauty and utility.

Knowing what we do of heredity and its subtle laws and processes, we must conclude that the fundamental or ultimate principle lies first in the primitive cell which dates from the time of conception. During the process of cell segmentation, proliferation and growth which follows fecundation, this morbific element or principle is capable of transmission from cell to cell all through uterine life, and when child-life begins, the same parental reflex is carried on until the child reaches man's estate, *when he stands forth a complete composite picture of his progenitors.*

Now, when we remember that man in his physical organization is simply an aggregation of cells, and that every manifestation of this wonderful combination, whether it be physical, mental, moral or emotional, is simply a reflex of active cell growth, we can readily conceive how an *unhealthy* cell growth may contribute to disease. As a result we get an unhealthy physical organization, a weak vacillating and un-

steady mind, a loss of will power, the emotions excessive and the morals low. This tendency of parent to reproduce itself, is a law governing all organic life.

Next in importance as predisposing causes may be mentioned sex, nationality, the drink habit, pauperism, ignorance and the crime habit. In regard to sex, for obvious reasons, it is vastly greater in the male than the female.

Nationality no doubt cuts a large figure in the production of inebriety. The drink habit, through the influence of heredity and environment, is beyond doubt, the most prolific of all causes. Pauperism and the crime habit act in the same manner.

Next in the order of causes may be mentioned the neuroses (which more properly come under the head of predisposing causes) such as insanity, epilepsy, chorea, progressive general paralysis, hysteria and the like.

The exciting or direct causes of inebriety are many. To summarize we might say that *environment* was the exciting cause and covered the whole subject; that all the surroundings and conditions of life of the individual together act as a cause. To particularize we might mention: Bad associations, lack of education, occupation, over work, ill health, insufficient food and clothing, excitable temperament, disappointments, financial disasters, loss of dear friends and *unpleasant home surroundings*. This latter condition might be considered as the most prolific of all the exciting causes of inebriety.

It commences in early youth and drives the child from the home hearth, and for want of careful nurture, parental training and Christian influences, the boy seeks his pleasure in forbidden places and is soon on the road to ruin. Thus we see that *heredity* and *environment* are the two great factors in the production of inebriety.

Treatment: After what has been said of inebriety and its cause, it will be readily understood that it is a disease, not like the ordinary ailments with which the physician is brought in contact, but rather a complicated complex affair in which the whole organism of the individual has been laboring under pathological conditions, perhaps, for years. Upon close inspection, it will be found that the executive or will power is weak, that the mind is vacillating and unsteady, that the morals are depraved and the emotions are beyond control. By further examination the bodily health will be found considerably below normal. The man is unable to stand fatigue. He is either too fleshy or considerably emaciated. The heart becomes excitable, the kidneys congested and undergoing pathological change, the liver slowly taking on hypertrophy, atrophy and cirrhosis, and the lungs assuming that peculiar form of interstitial hyperæmia so common with chronic alcoholism. His power to do or to command is departed; his ability to grasp a subject and the power of concentration and retention of thoughts is almost nil. He readily sinks into all kinds of vice and immorality; trifles look like mountains. He is easily elated and as easily depressed. His love of family is changed. His health, habits, tastes, inclinations, yea, even his *desires*, have all become morbid and depraved, and you behold the man only a semblance of what he should be. Every tissue of his body has become diseased.

Under these circumstances, may I ask, is it possible that any one remedy or medicine, or any combination of medicines alone can be relied upon as a cure? In other words, can any morbid habit or taste, like the drink habit or the morphine habit, etc., be cured by medicine alone?

Again, is it possible that a habit, in which the entire man presents a complexity of pathological phenomena, can be recovered from in the short space of three or four weeks?

Does not every honest and intelligent physician turn his back indignantly upon such sophistry? To be sure, the patient might be placed upon proper treatment in that short space of time, and if continued under proper surroundings or environment may ultimately recover. Because a man suddenly ceases to get drunk is no sign that he is cured of inebriety, as evidenced by the large number, who, under temptation, so readily return to their former habits of dissipation.

Inebriety is a very complex disease, and presents a variety of morbid phenomena which require for its treatment and cure the proper application of all those rational and approved remedies and appliances which experience has taught us may be relied upon for the restoration of health. Medicine alone will not do it; confine-

ment will not do it; and imprisonment is worse than useless, as statistics abundantly demonstrate.

As the entire physical, mental, moral and emotional faculties of the individual are diseased, he is a complete wreck. He becomes incompetent as a citizen, and should be cared for and treated as a ward of the state. The public has a right to demand this: first, for the welfare of the ward; second, as a public protection; and third, as a matter of economy. In regard to the welfare of the inebriate, no one can question the propriety of proper treatment. Unaided, he is unable to rise above his degradation. He has fallen so low and has become so helpless, that he sinks deeper and deeper, day by day, in the wretched temptations and debaucheries thrown around him on every side, that he finally becomes lost to all sense of shame, or obligation to the public as a citizen, or to his family as a provider and protector. He holds his miserable existence by tolerance only. He has forfeited all rights as a citizen and ought to be treated as an incompetent. He already has an unsavory record in the police courts, has often done duty in the House of Correction, and has cost the public many an expensive law suit. Under such circumstances no one can question the right and duty of the state to take charge of this class of defectives. As a public protection, it is also the province of the state to take care of itself. The right-living public have rights that the evil doer must respect, and no community can carry self-respect until this prerogative is recognized and its mandates obeyed. The evil effects, humiliations, inconveniences, losses and injuries, not to mention the vast number of murders and other major crimes that so often follow as a result of the drink habit, are too numerous and exasperating to go unrebuked much longer. In regard to economy, the mind in its wildest conceptions can form only a faint idea of the vast array of figures required to represent the loss in monied value to the public from the drink habit. We need only refer to the nearly one million arrests made in this country during the past year from this cause alone; and this has no reference to the fabulous collateral expense growing out of the same cause. In regard to *treatment*, the cardinal point to be kept constantly in view, and which is paramount to every other consideration, is the welfare of the unfortunate victim; the danger to the public and the matter of economy being considerations of minor importance, and will follow as a natural sequence. What seems to be the great need, is a just and systematic law by which these unfortunates may be judged incompetent and placed in properly constructed institutions, built and governed by the state, and maintained by the state, and in part, possibly, by the inmates when able to pay. This want is recognized by private individuals in the form of the so-called "Keeley Cures," which are springing up all over the land.

These institutions should harmoniously combine the medical, moral, educational, industrial, correctional and custodial qualities. They should be built with due regard to proper classification. The inmates should be committed under the indeterminate sentence, and a clause admitting patients voluntarily should be inserted in the law, but being subject to the same discipline.

Each institution should possess sufficient land, as farming and gardening should be made strong features in the treatment. With proper machinery, a limited amount of manufacturing could be carried on. With the exception of a foreman or two, the institution should be carried on by the inmates, thus making it, as far as possible, self supporting. The institution should be properly officered; and at the head, under the general supervision of the state board of control, should be placed a physician of known intelligence and experience, with assistants under whose immediate charge the entire workings of the establishment should be placed. In regard to specific treatment, (which we have no faith in) the physicians in charge should be well qualified and the treatment left to them. All the moral influences of a first-class institution should he thrown around the inmates.

The industrial and educational features of the establishment should receive marked consideration. In fact, herein lie two of the most pronounced features of the treatment, especially with the younger classes. In regard to correction, I think nothing of a so-called punitive nature should be used, simply the correction that naturally inheres to a well regulated hospital where a strictly humane and dis-

ciplinary regimen is faithfully carried out. The custodial feature of the institution will always be a pronounced one. Herein will gather a large class, without friends or kin, aged and homeless, weakened in body and mind, and beyond any hope of recovery. Like other diseases, not all can be cured, but all can be benefited. And while all may not be cured, these unfortunate creatures can be kept away from all harm to themselves and others, and the public relieved from the burden of arrests, suits at law growing out of personal encounters, crimes of all kinds, murders, divorces, etc., and many other bad conditions of society the direct result of the drink habit.

There will be three classes represented; the upper, the middle, and the lower. The upper class will include all those from the higher walks of life; the educated, the wealthy, those in professional life, higher official life, etc. From this class, coming as it does from a higher social scale, we must expect the largest per cent. of recoveries. However, this does not always follow, for we occasionally observe the most degraded coming from this class. From this higher social scale will "graduate" the so-called "Keeley Cure" cases. As a class, they have better organization; their surroundings are superior; they have more to live for; and they are received back into life, into the arms of friends and comfort, and as a matter of course be much more likely to remain cured than those coming from the more defective classes. The middle class will comprise that large body of workers and toilers, principally in agricultural, industrial and mechanical pursuits, from which we may reasonably expect many recoveries, but not in such a large proportion as from the higher walks of life. They represent, on an average, a somewhat lower grade in the social scale of life, and as a result will yield a less number of recoveries. To this class will naturally fall the principal industrial pursuits of the institution, through which the establishment will be made, at least, partially self-sustaining.

To the third and last class belong all that vast horde who have been born in ignorance, poverty, wretchedness and vice, and comprise what is commonly called the "criminal classes." They have not the *ability* or even the *desire* to rise above the low level to which they were born, and from this class we must expect but few recoveries. Custodial treatment, with the moral influences of a well regulated institution thrown around the unfortunate, will be about all that can be done for this class.

And now what shall we say in regard to prevention. We may state that it is vastly superior to cure. As in other diseases, our first duty is in the line of prevention. The science of prophylaxis, which is rapidly coming to the front in all forms of disease, is no less important in the one under consideration. Here is an evil that surpasses all others combined, and it is preventable. It is a disease whose chiefest cause is hereditary. Every medical, reasonable and legal remedy should be used to prevent its spread and propagation. It is claimed by good authority that sixty per cent. of all drunkards inherit a tendency to the disease. That is, they inherit an unstable nervous and physical organization which predisposes to inebriety. I think the above is a low estimate. In my somewhat extended experience in caring for this unfortunate class of humanity, I have seen but few inebriates who did not inherit some mental, moral or physical obliquity, if careful pains were taken to look up the ancestry. I believe seventy-five per cent. is nearer the figure. Now, if this large per cent. of drunkenness comes from inheritance as a predisposing cause, and if we were sure that this diseased state of society is preventable, and that large numbers can be cured, how essential it is that every responsible and legal effort should be made to suppress the evil. The law of inheritance, as already shown, is a wonderful process. By it, in the one instance, all the virtues and beauties of a perfect parentage are reflected in the child; by the same law, in the other instance, all that is hateful, hideous and damnable may be handed down from the parent to the offspring to the perpetual torment of future generations.

To prevent the propagation and spread of this evil, the state should have a guiding hand. The two chief factors to be considered are isolation and the interdiction of marriage with the defective classes. These two problems are far-reaching in their nature, but not beyond the hope of accomplishment in the near future. As soon as the unfortunate is isolated and his

surrounding changed, improvement begins. He is out of harm's way, and no longer in a position to hand his diseased organism down to other generations. He is provided with a good home and taught industry; he is placed in an atmosphere of morality and taught to respect the rights of others. No sane person can question for a moment the right and duty of the state to care for its own defective classes. In regard to the interdiction of marriage, it will be a more difficult question. It might be a hard matter to determine or to draw the line and say who should be debarred: yet this can be done through the combined action of good men, governed by a just and humane law, which should be national in character. When the national government shall see fit to create a department of health, with a cabinet officer at its head and with proper branches throughout the different states and territories, these public health problems will all fall naturally under this department and can be equitably adjusted as the needs of each seem to require. Already the lax and unstable character of the marriage laws of the different states is being investigated by legislators and others who have the best interest of the nation at heart, and before long we hope to see the United States enjoying a marriage code, uniform and national in character, which will forever put a stop to the present lax and almost indiscriminate mixing of the sexes. Under one grand department of health all the sanitary measures of the country should be placed, including the vexed one of immigration, disinfection and preventive medicine, epidemics, and defective classes of every description, and by just and humane laws, in time, eradicating forever these mental, moral and physical imperfections from the land.

The next (possibly the first) great factor to be considered in regard to the prevention of inebriety, is the presence of alcoholic beverages throughout the length and breadth of our country. To suppress or regulate the manufacture and sale of alcohol is now, and has been, taxing many of the brightest minds in Christendom. A business of such vast proportions as the liquor traffic of this country, cannot be regulated except through the wisest, most deliberate and persistent action of the state. The manufacture and sale of alcohol cannot be stopped but it *should* and can be limited. A business that has been allowed to grow to such vast proportions under the laws of the state, and thereby fostered in its growth, cannot now be suppressed without compensation, and to purchase the plants by taxation, the people would never submit to. But it seems to me by the very nature of their tolerance, the state, by legislative enactment, has full power to limit the *sale*, and the *demand* would regulate its manufacture. South Carolina, I believe, is now entering upon an experiment in this direction, which will be watched with much interest. Norway, it is said, has proved the success of governmental control. At present, in this country, a license sufficiently high to control its sale is by many thought to be the only way out of the difficulty; and even this can only be done where the citizens are educated up to it. Again, when any incorporated industry injures its employes or the public, there is ample means of redress and compensation. With just reason the same rule may be applied in regard to individual or public damage done through the liquor traffic. This is a broad, difficult but interesting subject and time has allowed me only to touch upon the cardinal points. If I draw the attention of the profession a little closer to this subject, the object of this somewhat desultory paper will be accomplished.

References: Maudsley, Davis, Crothers, British Medical Journal, International Prison Congress Literature, London Lancet, Howle, Clark Bell, Lord Coke, Moyer, Doering, Lord Hale, Blandford, Tuke, Griesinger, and many others.

Cocktail Bitters.

The *Bottler's Gazette* claims excellence for this:

℞

Spirits	30 galls.
Bitter orange peel	8 lbs.
Cinnamon bark	8 "
Cudbear	4 "
Canalles	1 lb.
Quassia chips	½ "
Gentian roots	½ "
Grains of paradise	½ "
Cloves (whole)	¼ "
Colocynthin	¼ "

Bruise, and macerate for ten days, when it is ready to be filtered and bottled off.

For Pityriasis Rubra.

℞

Calaminæ	gr. xl.
Zinci Oxidi	℥ij.
Olei Olivæ, Acquæ Destillatæ	ää ℥j.

Misce et fiat applicatio.

CLINICAL LECTURES.

COLD ABSCESS OF FOOT; UNDERLYING TUBERCULOSIS OF TARSUS; AMPUTATION OF LEG; TUBERCULAR ARTHRITIS OF KNEE; AMPUTATION OF THIGH.

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This patient comes before us with the history that, a year ago, he sprained his foot, and that, following the injury, a swelling gradually appeared on its upper surface and the function of the member was lost. He has also lost in flesh and strength and has been obliged to abandon his work in a tailor-shop, while, for three or four months, he has gone about only with the aid of crutches. Two days ago, on admission to the hospital, a large fluctuating tumor was found on the dorsum of the foot; he was coughing and raising material which contained tubercle bacilli and the diagnosis was made of incipient phthisis with cold abscess of the foot. On holding the heel with one hand and pressing against the toes with the other, or on twisting the foot on its axis, pain is produced. The tuberculous disease must, therefore, involve the bones as well as the soft parts of the foot, but its extent can be known accurately only by exploration. I purpose, therefore, evacuating the contents of the abscess and exploring the diseased focus. If the bones are in such a condition that there is no probability of future usefulness for the foot, amputation will be performed. The field of operation has already been shaved and enveloped in an antiseptic dressing although amputation has not yet been decided upon. The Esmarch bandage is applied over bichloride towels to facilitate matters if worst comes to worst, and the cold abscess is opened by a longitudinal incision, exposing a jelly-like mass of tuberculous debris which is not, properly speaking, pus. It will not flow, but is scooped out with the sharp spoon. The diseased process has gone so far that it is necessary to make a counter-opening on the outer border of the foot, and the tissues are so œdematous that serum exudates along the path of the knife. You can see the tendons of the extensor longus digitorum and the muscular mass of the extensor brevis. The tuberculous debris extends more into the tarsus and I have scraped out a mass of rotten bone. This is the condition that I expected to find on account of the tenderness and complaint of pain on manipulating the foot, but if I had not made a free incision, I would not have found the tunnel that leads down to the deep-seated focus of disease. The operation is much like following a vein of ore or coal, which is sometimes thin, sometimes thick, but which must be dug out to the end if the mining or the surgery is to be thorough.

Although it is a pity to sacrifice a member on account of a limited focus of disease, experience has taught that amputation is the safer treatment for such trouble. If I try to save the foot, the probability is that the tubercular processes here and in the lung would react upon each other so as to aggravate the phthisis and render amputation unavoidable later. You see I am washing my hands again as carefully as when the operation was begun, for they have been infected in handling the tuberculous material and I do not want to carry any septic element into the fresh wound which I shall make in removing the foot.

The best operation for removing a foot is that which takes a line at least four inches above the ankle. This fact we have arrived at through the experience of patients and instrument makers, that the best artificial feet can be applied to such stumps. With the long amputating knife, I make a circular sweep through the skin and superficial tissues down to the muscle. After allowing this layer to retract, I cut through the muscle and then, with the dry dissector, separate the soft parts and periosteum from the bones. This takes a little more time but is of advantage to the patient in affording a periosted covering for the stump of the bones. The interosseous membrane is now severed, the retractor applied and the bones sawed. You will notice that I bevel off the anteri-

or border of the tibia with the saw and trim away with cutting forceps any little uneven points that are left. The next point in the operation is attention to the blood-vessels and nerves. Both the anterior and posterior tibial nerves, and any smaller ones that may be seen, are separated from the sheathes of the accompanying vessels, pulled down as far as their elasticity will allow, and severed. If this precaution were not taken, they might be included in the cicatrix and cause a painful stump. After ligating the blood-vessels, I insert deep buried sutures of cat-gut in order to unite over the ends of the bones the firm fibrous structures which make a good foundation for a comfortable stump. No irritating or irrigating fluid has been used on the wound except a spray of hydrogen peroxide, the policy being now to keep wounds clean from the beginning rather than to deluge them with antiseptics. The deep sutures relieve all tension on the skin, which is completely closed with catgut, leaving no provision for drainage, as I anticipate no need for it. Iodoform is powdered over the line of sutures, the stump is annointed with sterilized vaseline and dressed with antiseptic gauze and cotton. Over all is applied rubber tissue held in place by a dampened gauze bandage. Considerable pressure is thus applied so that no hemorrhage need be feared when the tourniquet is removed. In twelve or fourteen days, I expect to remove the dressing and find the wound virtually healed. Of course, if fever or any other disturbance should occur, the dressing would be changed sooner. The stump will be kept rather high for the first twenty-four hours. A laxative will be given if necessary to keep the bowels open.

This patient presents a condition in most respects similar to that illustrated in the last case. He is thirty years old. Three years ago he was in the hospital with osteitis of the head of the tibia. There are two scars just below the knee, whether from ignipuncture or incision into the abscess I do not remember. At any rate, he recovered from the trouble and enjoyed good health for some time. A few days ago, however, he returned with a very serious and painful affection of the knee. The leg cannot be completely extended, it swerves outward and there is a tender spot over the inner condyle of the femur, externally marked by a redening of the skin. He lies most of the time in bed with his knee on a pillow and his hands grasping the top of the bed, so as to steady himself for his knee "jerks" every little while; i. e., he has frequent muscle spasms. He has had some elevation of temperature, his lips and face show his serious condition, and he has had so much spasm and jerking of muscles that his sleep has been disturbed. There is a severe acute exacerbation of some chronic inflammation about the knee. On account of the tenderness and slight enlargement of the internal condyle of the femur, we may locate the trouble in that place. You will note that the enlargement has pushed the knee outward and increased the angle which the leg makes with the thigh. There is some atrophy of the limb and the subcutaneous veins are quite prominent, indicating obstruction to the return of blood in the deeper veins. Under chloroform the leg relaxes somewhat, but cannot be fully extended. Let us compare the two legs. Atrophy of the muscles above and below, makes the affected knee more conspicuous; there is, however, some actual thickening over the internal condyle. The inflamed area and the distended veins are brought out more plainly by contrast with the healthy side. The patient has suffered so much that he is perfectly willing to have anything done that may be necessary, even to the loss of the limb. What I shall do will be, first, to find the focus of softening in the condyle and remove it with the curette if possible. If I find a more extensive involvement of the structures of the joints, I shall resect, and if there has been so much destruction of tissue that it seems hopeless to try to save the knee, I shall amputate. The last alternative I hope will not be forced upon me, but I shall plan my first exploratory incision so that it can be utilized either for resection or amputation as necessary. It is made obliquely downward and outward from the internal condyle, over the front of the patella. The patella is firmly attached and, as I cut into the soft tissue over it I find it thickened and certainly tubercular. On opening the joint, I find a large focus of softening and acute inflammatory exacerbation of the older lesion in the condyle. The question is no longer between curetting and resection, but between

resection and amputation. The patella, at any rate, must be sacrificed, and I grasp it in lion-jaw forceps and cut it away from the femur to which it is attached by osseous formation. The tubercular tissue extends all the way around the front of the joint to the outer side. If resection is practiced here, it will be necessary to remove an immense amount of tissue, the leg would be shortened three or four inches and would be stiff. Even then, I should not feel confident that all the diseased tissue had been eradicated. I shall let the final test be the appearance of a sawed surface of the condyles after the first step of a resection. The sawed surface looks better than I had feared, but I have exposed a quantity of tubercular debris in the inter-condylar notch, involving the periosteum.

Amputation is manifestly necessary in this case and I shall not perform it in any typical manner but so as to save as much as possible of the thigh. I cut forward to the bone from behind so as to join the previously made anterior incision. The periosteum is scraped upward on the femur and held, along with other tissues, by the retractor before the bone is sawed through. I find after removing the bone that the great sciatic nerve has been severed just at its division. It is pulled down and cut as were the other nerves to prevent its entanglement in the cicatrix of the stump. The vessels are secured and the tissues united in the usual way. If I had known in the beginning that amputation was inevitable, I would not have proceded in this way, but to have set about a typical amputation of the lower part of the thigh would have been to condemn the limb without a trial.

COMMUNICATIONS.

THE DIAGNOSIS AND NOMENCLATURE OF FEVERS.*

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The aim of this paper is not to discuss the general subject of fevers. It is not hoped to throw light on the subject. Its remarks will be mostly confined to the first week of typhoid, and a variety of fever which the general practitioner of this state, at least, finds most commonly in his practice. It will consider the difficulty of the conscientious practitioner in diagnosing this class of fevers at the outset. When once diagnosed it will show how impossible it is to correctly name, taking the various text-books as a guide.

It is a fact that various types of disease are endemic and more or less confined to certain portions of the world. Moreover, it may be very difficult for a text-book to describe accurately the various diseases of each section. It is barely possible that the type of fever which the writer has most to deal with is confined to the Lake Erie region of western New York; or that he has been guiding typhoid fever for the past twelve years to a successful termination and has been stultifying himself by giving it a less dreaded name.

The classification most commonly found in our text-books and fully described is—typhoid and typhus, malarial remittent and intermittent, pernicious malarial, relapsing, yellow fever and the eruptive fevers of childhood. In other works we find a description of bilious remittent, typho-malaria, gastric, mucous, nervous, hysterical and simple continued fever. We shall exclude from our discussion yellow fever, relapsing, typho-malarial, hysterical, the eruptive fevers and malarial fevers, except as the term malaria may have some bearing upon the question under discussion.

A few words in the first place in regard to diagnosis. All observers agree that it is not possible in many instances to diagnose typhoid before the end of the first week. The conscientious physician, who believes in calling things by their true name, would rather test the confidence of his patient and his or her friends by

*Read before the Medical Society of the State of New York.

delay in naming the disease, that appears brilliant by making an early diagnosis and be obliged to change it at the end of a week. He shrinks from getting the dishonest credit of carrying to a successful issue a case of typhoid when it is a variety very much simpler and easier to manage. It is true, I believe, in many instances that the individual interpretation of symptoms often modifies our diagnosis, and to find a case of typhoid with all the typhoid symptoms as described by Louis in 1829 is a rarity. I was once placed in a very embarrassing situation by the hesitancy of a brother practitioner in concurring in a diagnosis of typhoid fever on account of the absence of some of the symptoms we usually find. The case was diagnosed as an ambulatory type of typhoid, not coming under observation until the second week of the disease. The situation soon becoming serious, counsel was called—one of the brightest and most successful practitioners in that section. On account of the presence of constipation and some other irregularities, he would not admit of the correctness of my diagnosis. The embarrassment was soon discovered by the family and the ignorant father who all along had insisted that his son had "canker on the stomach," naturally considered it a point in his favor. In due time an enema was decided upon. It was successful and the young man had not been in bed but a few moments when he uttered a piercing cry from the presence of pain in the right iliac region. I immediately said, "doctor! perforation!" My face evidently indicated alarm. With a ringing laugh at what he terned nonsense, he refused to admit the possibility of such a complication. It took a long time of active work to control the intense suffering. Abdominal distension, tympanites, fecal vomiting, collapse, and death followed in the usual order. And yet never would counsel admit that it was typhoid fever or the complication, a perforation of the bowel.

Many times have I wished that the consultant had not been such a devoted advocate of the typical cases of Louis.

In regard to the diagnosis of typhus, it is only the initial cases of any epidemic which appear puzzling. Being a member of the Charity Hospital staff of New York, I remember well the onset of the epidemic in the winter of 1881. At lunch one day a house physician said he had several cases in his wards which he could not diagnose. One after another joined in describing similar cases they were puzzled over, until it was found there were twelve such cases. Before the day passed it was found we had twelve cases of typhus fever.

Dr. J. Lewis Smith was my visting physician. About the time of the above incident I asked him to see a case I was uncertain about. Walking up to the bedside of the patient he said, "just listen to his lungs, doctor." As I was bending over for the purpose, he spoke quickly, saying, "doctor, don't do it! Send that man to the typhus fever hospital on my authority. We have already sacrificed too many young men in this hospital from that disease." The man died of typhus the next day.

The type of fever I wish more particulary to call your attention to, with the hope that it may elicit discussion, is a type more common than typhoid in my experience in the Chautauqua District of western New York.

By hastily glancing over my memoranda for the last few years, I find forty such cases for illustration; cases which at no time in their progress seemed to admit of the diagnosis of typhoid fever. In several instances, it seeming wise to take extra precautions, counsel was called and concurred in the diagnosis, by excluding typhoid. In the great majority, the course of the fever was such an uninterrupted, uneventful one that conusel was not considered and very little anxiety was felt as regards prognosis. It seemed a very comfortable sickness. Some being, of course, in the recumbent posture would feel like the average woman on the second day after parturition—perfectly able to go to work. They all recovered. They were equally divided between the two sexes. As regards age, seven years was the youngest and sixty-five the oldest. Twenty-two were under thirty years of age, nine between thirty and fifty, and twelve between fifty and sixty-five.

The duration was from seven to forty-two days, the former period being very exceptional, the latter quite common. The greater number, by far, average twenty-one days. It might have been the myopic vision of the observer, but all of the cases seemed to run in cycles of seven.

Their course was seven, fourteen, twenty-one or thirty-five days duration.

The initial symptoms were precisely like typhoid; slow, insidious and progressive. It was impossible to make a diagnosis, excluding typhoid, before ten days. Then it was reached by an absence of the characteristic symptoms of the latter.

Headache was complained of in some instances, but in most of them not a pain was experienced from the beginning to the end of their sickness. A dull, listless expression of the face, hebetude of mind, furred tongue, loss of the sense of taste and constipation were usually found.

The pulse, normal at the beginning, would average between eighty and ninety during the course, rarely going above one hundred, except in the convalescent stage. Then it was a pulse of exhaustion, not a febrile one.

The temperature gradually rises as a rule, although a high temperature in the beginning is more frequently found in this than in typhoid fever. It reaches its height at the end of the first week, maintains it one, two or three weeks, as the case may be, and as gradually subsides. The defervescence occupies a week. It is not quite the characteristic curve of typhoid. It is more like going up a hill running along a plain and going down again. The afternoon temperature, which persists from day to day and week to week, is from 102° to 103½°. The patient is left weak and emaciated and the convalescence may be more or less protracted.

Probably some have said, ere this, why not call such cases a mild form of typhoid? In answer I would say that the absence of rose-colored spots, iliac tenderness and gurgling, diarrhœa, brown dry tongue, delirium and all the symptoms which would indicate serious conditions has not permitted; this absence of the very symptoms which all authorities agree upon as being characteristic of that disease. The above symptoms, one and all, are in the cases we diagnose as typhoid.

It is always our custom, however, to disinfect the stool at the beginning of every continued febrile attack. It gratifies one that this precaution has been observed when what appears to be a simple case in the beginning turns out to be a serious typhoid. It is, too, a very easy matter to continue the disinfection as a precaution, even though typhoid has been excluded.

What, then, shall we call this type of fever? What do the text-books call it? At the bedside, when once the point is reached, that we can safely exclude typhoid, we say something like this—If some not over-scrupulous physician had this it would be called typhoid. Another would call it malarial. Another remittent. Another gastric. Another bilious. Another typho-malarial, and still another simple continued fever. Each one would be naming it as best he could from his own experience and with no text-book to guide him.

Suppose we call it malarial. Flint, Loomis, Bartholow, Reynolds, Pepper and Niemeyer admit of the term malaria only in connection with the malarial fevers of the south. All observers agree now that in malarial remittent, malarial intermittent, and pernicious malarial fevers the parasite of Laverau is found in the blood and that pigment is deposited in every organ. The same objection is found to the name remittent fever, as all the authorities consulted unite in saying that between remittent and irremittent fevers there is a close relationship and that they are interchangable. Some claim there is no distinction whatsoever. Bouilland terms any attempt to distinguish them as a "nosological superfœtation."

Surely neither the term malarial nor remittent, as now interpreted, can be used, as there is no parasite of Laverau in the blood of our patients.

It is a fact that in a practice of over eleven years, the first patient, having a continuous residence here, is yet to be treated for any disease complicated by true malaria; and the first malarial dose of quinine is yet to be given. Why not call it bilious fever? We frequently have, and this seems to be the name most generally recognized. But we feel like apologizing every time the name is uttered. Moreover Flint says, "The term 'bilious' is superfluous and so far as it has any significance tends to perpetuate a pathological error."

The name typo-malarial cannot possibly apply, as the malarial element is certainly wanting—besides, so few admit of the existence of the fever named such by Sur-

geon General Woodward that further consideration is not necessary.

How about gastric fever? Lebert says this is an infectious disease, and found in an epidemic form. This is certainly not true of the fever in question. Olsen considers its existence as by no means certain and that a great majority of all cases occurring in this country are a mild type of typhoid. As Niemeyer describes gastric fever the picture is more nearly portrayed, but he gives a higher range of pulse than is found in this type. Moreover, there is not pain or pressure in the epigastrium and the variety of gastric symptoms that he describes. Another proof that it is not the fever in question is that the ephemeral fever of a day, mucous and catarrhal fevers are all subdivisions of the variety gastric fever.

Hutchinson, in *Pepper's System of Medicine,* gives a simple continued fever of one to twelve days' duration. After debating the question of its existence, he comes to the conclusion that there is such a fever. This cannot be our type as it is too short in duration. He also says that it is marked in the severity of its initial symptoms. The temperature rises four to seven degrees within a few hours. As to two of the causes of this fever, viz., excesses at table and extreme mental or bodily fatigue, there does seem to be a similarity, for in the great majority of cases a bad breath, foul tongue, a stomach which has been asked to digest more than it has been made able, an inactive liver and an overloaded bowel are the conditions found.

In two of the cases given, the symptoms were especially indicative of exhaustion of the nerve centers. One was a lady of fifty who had lost home and property, her husband, her daughter in puerperal convulsions and a son in a railroad accident within a few years, the two latter being close together. She had the continued fever of more than average duration, but her tongue was clean throughout her whole sickness and all of her sickness seemed to be more the result of a shock.

Another one, that of a young man of nineteen, by dissipation in every form had burned his candle very fast. The fever lasted twenty-three days. The tongue was perfectly clean throughout the whole course. Nature, in each case, seemed to take this method of giving their bankrupt nerve centers a chance to recuperate. They seemed to be types of what might be called nervous fevers.

In a discussion on malaria in the New York Academy of Medicine in March, 1891, Dr. Francis Delafield described four types of fever as he found them. One type resembled somewhat the fever under consideration. He says, "Patients who suffer from a continuous fever lasting usually about two weeks, not often less, not often much longer; the febrile movement well marked, 103° to 104° F. when at its height, which was usually in the afternoon; there was usually a great deal of headache, with more or less perspiration. There were cases of this kind which it seemed impossible to distinguish from typhoid—the fever did not seem to be affected by remedies—it ran its course and stopped when it got ready." With the exception of the considerably shorter course the description of the type by Dr. Delafield comes nearer to the one in question than anything we have yet found. It may be the same fever and yet have a shorter duration on account of its different location. I regret that Dr. Delafield gives no name to this form.

I have taken altogether too much of your valuable time in tearing down. I am frank to say I cannot construct. But since by the general practitioner, the term remittent is already so frequently used with this type I will suggest the name, *Northern Remittent Fever.*

Splenotomy Performed by Monod.*

He (*Bull. et mèm. de la soc. de chir. de Paris*, T. XVIII, p. 668) reports a case of splenic abscess, its causation being somewhat doubtful to him. The chessy masses were found mixed in the fluid contents of the abscess, suggesting tuberculosis. Microscopical as well as bacteriological examination gave negative results regarding tuberculosis; even vaccination of guinea-pigs with the pus failed to produce the expected result, micro-organisms in no case being present. Ecchinococcus was also excluded after careful examination.

A Vehicle for Iodide of Potash.

Delavan recommends essence of peppermint and milk as an agreeable menstruum for the administration of large doses of iodide of potash.

*Translated for THE MEDICAL AND SURGICAL REPORTER by Marie B. Werner, M. D.

SOME FORMS OF INSANITY AND QUASI-INSANITY IN CHILDREN.*

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Mental disease in children is not very common, neither in a few of its types is it very rare. It has received but little discussion from writers on psychiatry and pediatrics, but it is of sufficient practical importance to claim the attention of general practitioners as well as specialists. Cases both of juvenile insanity, and of what I would term quasi-insanity, are confused with other affections and conditions, as with hysteria, with bad temper, with vice, with the delirium of fever, with meningitis or brain tumor, and even with surgical affections.

Mental disease in childhood is, as a rule, limited to a few forms, and a little consideration will show that this might be expected; as for the full development of certain types of insanity it is requisite that the faculties of the mind should themselves be evolved to a certain point. In a strict sense, the existence of mental disease presumes the previous presence of mind; hence some would exclude from insanity proper idiocy and imbecility due to congenital structural defect, although for practical purposes this is not necessary, as mentality is supposed to be the inherent attribute of the race. Paranoia, or primary delusional insanity, will not in its typical forms be observed in children under puberty; but abortive or imperfectly developed paranoia is not an uncommon juvenile affection, and some of its varieties I shall include under quasi-insanities. Some children are pursued and worried with imperative conceptions, insistent ideas, and morbid impulses and propensities; and, after all, as these are but delusions in the making, if they have any systematization in their fabric, and are not merely the ebullitions of mania or melancholia, the child is suffering from a form of incomplete or quasi-paranoia. I thus refer to paranoia at the outset to emphasize the fact that insanity in children is simple in kind in accordance with the simplicity of the mind itself.

I shall not consider idiocy or imbecility except moral imbecility briefly. Kerlin,[1] who has added so much to our knowledge of moral imbecility, has sometimes used the term juvenile insanity in describing moral imbecility; but it is better to speak of both moral imbecility and moral insanity in children, as all forms of mental alienation in childhood may be properly called juvenile insanity.

The varieties of true insanity most commonly observed in children, are (1) melancholia; (2) mania; (3) choreic insanity; (4) hysterical insanity; (5) cataleptic insanity or cataleptoid insanity; (6) epileptic insanity; (7) moral insanity; and (8) certain quasi-insanities—forms of morbid fear and of morbid doubt, perversion and impulse. We have also so-called etiological varieties of insanity in children, as dementia due to inherited syphilis, febrile and post-febrile, reflex and masturbational insanity; but these and other classes founded on causation, may according to inclination or stand-point be regarded as forms of insanity, or as groupings of cases which indicate simply the important causes of some of the clinico-pathological types.

Let me first say a word or two about melancholia. It is always necessary to distinguish between monomanias or paranoias and melancholias; but genuine, uncomplicated melancholia is undoubtedly seen in children. Sometimes hallucinations are present with the mental depression and sometimes not. Melancholia in a child seldom assumes the extreme form which is so frequently observed in the adult; but now and then a true agitated melancholia or melancholic frenzy is observed. Ordinarily a child suffering from melancholia will be blue, sad, anxious, weeping, restless by day and by night, and wanting in the liveliness and changeability of children. The delusions so common in adults, as of self condemnation, of the unpardonable sin, of coming to want, or of fatal organic disease, are often absent; but children who are brought up in a morbidly religious, or in distressing sur-

*Read before Pennsylvania State Medical Society, 1893.

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1 Kerlin: A Clinical Lecture on Idiocy and Imbecility, *Medical and Surgical Reporter*, May 20 and 27, 1882.

roundings, sometimes exhibit a delusional state of a religious and painful character. The varieties of melancholia most frequently observed in children, are probably the hypochondriacal, and the excited or agitated.

Suicide in children is not commonly due to melancholia, although it is occasionally, and in these cases an inherited taint is often present. Children like adults are now and then driven to melancholia and suicide by want of care and ill treatment.

Mania is, on the whole, the most frequent form of juvenile insanity; but, as a rule, it is less tenacious, less violent and more curable than in the adult. Much has been and much might be written about it, but I shall here limit myself to a few remarks on the somewhat frequent occurrence of true mania in children who are imbecile or partially imbecile, or who suffer from some form of cerebral arrest which gives rise to spastic palsies, a subject of considerable practical interest.

One year ago I first saw a girl of 12 years old, the victim of a form of infantile spastic paralysis affecting the right side, but especially the upper extremity. When seven months old she had one severe spasm, and none afterward. Her mental development was moderate in degree; but not what it should have been for a child of her age, but she had been docile, obedient, and affectionate, and without any moral perversion. I saw her last one week ago. During little more than a year she passed through an attack of acute insanity having four more or less distinct periods or stages, respectively, (1) of depression or sadness; (2) of excitement; (3)of torpor or lethargy; and (4) of gradual convalescence. In the first, she was moody and melancholy and had delusional religious tendencies. She passed in five or six months into a stage of gradually augmenting mania, in which she was highly excitable and emotional, destructive, inclined to stealing and all sorts of michief; she took the most violent dislikes to her nearest relatives and friends. She wished to be always on the go, and was in a state of constant unrest; at times she had screaming spells, and attacks of stubborness which would last for hours or days; she would talk incessantly, and would not sleep until twelve or one o'clock, and then would awake again at four.

After four months of this mania, without special treatment, her parents finding it practically impossible to administer remedies, she passed into a third stage of great lethargy and torpor, which was ushered in by what her mother termed a severe illness of three weeks with fever. The lethargic period lasted for more than three months. She lay in bed all day long, would not talk, slept much of the time, ate when she was fed, but did not ask for or seem to care for food. Gradually she came out of this state, her complete emergence requiring another period of about four months, at the termination of which, one week since, I found her as plump and well as she had been two years before; her general health perfect for her, although her menstruation had not yet come on. As one result of this attack, however, she seems to have marked increase in the spasticity of her affected arm; and in fact she was brought to me the last time chiefly for consultation as to the propriety of operating on the biceps and other tendons of the upper arm for the relief of the increased and annoying tonic spasm. When she was six or seven years old the tendo Achillis of the affected side had been cut with considerable apparent advantage to her in the use of the limb.

This patient, among other defects, had a high degree of hyperopia, one-eighteenth, with deep physiological excavation of both optic nerves, as determined by Dr. C. S. Turnbull, who believed that in ordinary cases, such an amount of far-sightedness would account for many reflex nervous symptoms, but was not sufficient to cause the acute mental attack.

This case is given somewhat in detail, as a lesson in the diagnosis and prognosis in similar cases, of which I have seen several. One, now a man in years, but less than a child in mind, has had several such attacks out of which he has emerged in nearly but perhaps not quite his old condition.

Some understanding of the subject of moral insanity in children is of great importance to the general practitioner, who is almost invariably first consulted by anxious parents about the unfortunate victims of these disorders. It is probably better that a distinction should be made between moral imbecility and moral insanity in children as well as in adults, although commonly this is not done. The

subject of true moral imbecility is the victim of heredity, and his condition is manifested as soon after birth as it is possible to recognize deficiencies in the moral sense through conduct. I have become only too familiar with this class of cases, presenting chiefly moral symptoms, cases which must be recognized as the subjects of disease, and the special care and treatment of which are forced upon us by every scientific and humane consideration. Such children are incorrigible to reproof and training. Punishment has no effect upon them, or only will be heeded to aid their escape from pressing annoyance or discomfort. Much difference of opinion has arisen with regard to the exact nature of such cases. One contention is that a case of pure moral imbecility or moral insanity does not exist, and that close investigation will always show some intellectual disorder. The difference is probably one of terms. Recognizing such words as morality and immorality, as expressing distinct ideas, no reason exists for not speaking of moral departure or moral disease. The doctrines of moral insanity and moral imbecility are, as Tuke claims, in full accord with the rules of evolution and dissolution as laid down by Spencer and Hughlings Jackson. I could, were it worth while, fill this paper with illustrations of moral imbecility similar to four cases which have been reported by Kerlin,[1] the first an illustration of the incipient prostitute, the second the incipient burglar, the third a hereditary religious hypocrite and egotist, and the fourth a confirmed juvenile confidence man.

In moral insanity as distinguished from moral imbecility, the patient has apparently been born in full possession of the so-called moral sense, as well as of the intellect. The perversion of the moral or affective life has been brought about by injury, disease, or vicious habits. Extraordinary perversions of character have been recorded in considerable number as due to acute fevers in children, as after scarlet fever and malarial fever.

The best method of treating moral imbecility must be sometimes met. In most genuine cases, education and philanthrophy, kindness and cruelty, the Sunday School and the reformatory, the asylum and the penitentiary, will equally fail, or perhaps I should not say equally, as in a very few instances, strengthening of the weak and imperfect coordinating centers may be impossible. To the typical cases, to the vast majority of cases that would come under this designation, belongs the term incorrigible. Some of the most practical and most experienced authorities as Hack, Tuke[1] and Kerlin,[2] believe that education in its ordinary meaning should be largely withheld from this class. The former says of them: "The early detection of these cases is not difficult, they should be subject to life-long detention, their existence can be made happy and useful, and they will train into comparative facility and harmlessness if kept under a uniform, temperate and positive restriction. The school-room fosters the ill we would cure; in teaching them to write we give them an illimitable power of mischief, in educating them at all except to do physical work, we are adding to their armament of deception and misdemeanor." As Kerlin puts it, we should refuse them the ordinary routine of education because "we believe that in educating moral imbeciles we are training experts for the later role of so-called moral insanity."

QUASI-INSANITIES.

In a philosophical sense sanity and insanity are relative terms whether applied to children or adults Certainly not a few may be properly regarded as on the borderland between mental health and disease, and these are perhaps best classed as examples of partial or quasi-insanity, forms of mental disease which in a certain manner and degree have the attributes of insanity. Quasi-insanity better expresses the idea than such terms as, partial or pseudo insanity, or borderland cases, for the prefix "quasi," as used in English, indicates that the thing spoken of resembles or has the attributes of something without being the latter in full sense. Some of the best examples of quasi-insanity are to be seen in those suffering from those affections which are shown by morbid doubts and morbid fears, and have been described under many names as *folie du doute*, introspective insanity; or as phobias in endless train—claustrophobia, agorophobia, pathophobia, pantophobia, etc.

1 Kerlin: *Medical News*, March 19, 1887, p. 326-327.

1 Tuke: Dict. Psychol. Med.
2 Kerlin: Op. cit.

Some knowledge of these phobias, and of what they import might be of value to many of my brethren not neurologists—to gynecologists and surgeons particularly. They are psychoses, which lead sometimes to oöphorectomies and laparotomies, to uncalled for operations and treatments of various sorts on all parts of the body. They are abortive or imperfectly developed mental disorders. Sometimes they are as transient in duration as they are limited in phenomena; but in other instances a few elementary deficiencies or disturbances may persist without much change or increase, through life. Many of these cases, like certain morbid impulses, belong under the general head of paranoia. They have been described not only as morbid fears or phobias, and as morbid doubts or abulias, but also as emotional monomanias, and even as forms of neurasthenia. They are fundamentally dependent upon the domination of the mind by morbid concepts and insistent ideas.

They are sometimes observed among young children, although more common after than before the period of puberty. There most striking illustrations occur in those who have not been subjected to any physical or mental strain sufficient to break down a healthy organization. Persistent fear of the monomanical type occurring in children is rarely due to overwork at school as is frequently supposed. The cause is generally in the child's progenitor or progenitors.

Not infrequently several of the so-called varieties are present at the same time, in the same case, and some cases belong to a class which has been well described as pantophobia, or fear of everything.

As to cases observed in comparatively young children, Hurd[1] reports one from an account written by the patient herself. When about twelve years old, she began to have strange fancies, as fearing that the blood flowing from a cut finger would harm those who came near her. Later, dressing, walking out of doors, eating, were all greatly interfered with through the same morbid ideas. She feared contagious disease because she might communicate it to others. The insistent idea changed from time to time, but seemed to spring always from the emotion of fear. She eventually recovered. Hammond[1] cites from King, of Sedalia, Missouri, an interesting case of pyrophobia in a boy of ten years old. Day and night he was infested with fear of this kind. On one occasion when the morning was cool he succeeded after a contest with his mother in opening the stove door and pouring a bucket of water over the fire. He is said to have been cured by quinine, the bromides, and the use of evaporating applications to the head.

A boy, 11 years old, developed what was practically a pantophobia, although his disorder exhibited itself chiefly as a pathophobia, or fear of disease. He was kept almost constantly in the hands of physicians. Sometimes his morbid ideas revolved around real affections of slight importance; sometimes his fears and suffering were due purely to morbid conceptions and insistent ideas. Now his eyes were the source of morbid dread, and soon his limbs were the seat of rheumatic pain; he narrowly escaped, after solemn consultation, a laparotomy for "typhlitis," a case of strange metastasis as the typhlitis was probably in his head. To a moderate degree he suffered from mysophobia, spending unusual time at his ablutions, teeth-cleaning, dressing, and in the care and treatment of his clothes. Anything in the nature of a symptom or a disease mentioned in his presence was likely to take possession of him. His morbid notions and apprehensions were fed and encouraged by the unceasing attention of members of his family. He was the only son of a widow, and was under the tutelage of a mother, a maiden aunt, and a grandmother, probably the worst board of management for a pathophobic boy that could have been chosen by perverse fate. He was practically cured by taking him from his home surroundings, disregarding his complaints, forcing him to do things on time and after the manner of others, at the same time carefully but not obtrusively looking after the general health.

Another boy, at the age of ten, began to develop the scrupulous and mysophobic type of monomania; in fact he was, as so many of these cases are, an illustration of an admixture of several of the so-called classes of morbid fears. He was constantly worrying about many things that he said

[1]Hurd: Cited by Stearns in Lectures on Mental Diseases, 1893.

[1]Hammond: Treatise on Insanity in its Medical Relations, New York, Appleton & Co., 1883.

and did in his intercourse with others. If left alone, he would spend hours in bathing and washing himself; and often imagined that he had been polluted or would contaminate others. The symptoms were in many respects like those of the lady described by Hammond,[1] and to whose case he first applied the term mysophobia—who could touch nothing without being irresistibly impelled to wash her hands, and who in many other ways was tormented by the fear of contamination. This boy improved greatly under mental discipline, out door exercise and careful tonic medication.

It may be necessary sometimes to separate a form of *juvenile dementia the result of inherited syphilis* from idiocy and imbecility, whether of syphilitic or other origin, which may commonly be done by the fact that the dementia usually comes on after the child is four or five years old, and therefore when the mental condition has been determined not to have been that of idiocy. In rare cases, it happens that a juvenile or infantile dementia occurs when the child is two or three years old, so young that its true mental status has not been fully determined. With this word of caution as to the possibility of inherited syphilis showing itself in a child otherwise healthy in the first year or two of its life, most of the cases of this form of dementia, will be comparatively easy of recognition. A family history of syphilis will often but not always be obtained. Often the upper incisors will be pegged and notched, and cicatrices at the angles of the mouth, and the characteristic physiogonomy be present; the child will have attacks of keratitis, choroiditis, or iritis, or a history of snuffles, or of rash; and sometimes epilepsy will have developed.

Masturbation Insanity as occurring both in children and adults has been both over and under-rated, but on the whole, the tendency has been to the former rather than to the latter. Some alienists almost deny that this vice is ever the true cause of insanity; holding that it, like the insanity is due to the neuropathic state of the individual, or that at the most it is merely a concomitant or an aggravating cause. My experience leads me to believe that while, as is known to almost everyone, the vice is extremely common, especially among boys, it only in rare instances is the true cause of mental disease, but that these instances, though rare must be recognized. Of recent writers, Spitzka[2] has laid the most stress upon masturbational insanity. According to this writer, the typical masturbational psychosis occurs between the thirteenth and twentieth year, and therefore at a time which just removes the subject from consideration in an article on diseases of childhood proper. Occasionally, however, the same symptoms and conditions are observed before puberty, although the dementia then is more like a true imbecility. Infantile insane masturbators are more liable to epileptiform attacks than to outbursts of mania.

TREATMENT OF SCARLET FEVER.*

W. C. HOLLOPETER, M. D., PHILADELPHIA.

It seems like a work of supererogation to read before this society a paper on the treatment of scarlet fever. Yet medical science has grown within the past few years, and is growing with such phenomenal rapidity, that it would seem profitable for us to pause for a moment on some occasion like this, and review briefly what we have gained to combat so formidable a disease.

The general tendency in the treatment of all diseases, is growing more and more decidedly preventative in character. This is especially true of the eruptive and contagious diseases and we are succeeding, in a great measure, in limiting their spread. Within the last decade, while we have yet our annual visitation of measles and scarlet fever, we do not have such widespread devastations as formerly. The large cities always contain a certain proportion of diseases of this character, and it is a source

1 Hammond: Op., cit., p. 425.

2 Spitzka: Cyclopedia of the Diseases of Children, Vol. IV., p. 1047.

* Read before Pennsylvania State Medical Society, 1893.

of frequent wonder that where so many thousand of the unclean are huddled together, we should not have more disastrous epidemics. The solution of this question is found in the fact that more care is exercised on the individual cases—preventative measures are more carefully observed and enacted by the physician and nurse. Not only is this true in house epidemics, but the treatment of the individual cases is more certain in this way of escaping the not the less important sequels.

I have been induced to make these preliminary remarks by observing, retrospectively, with what marked success I have conducted many severe cases of scarlet fever through the most trying and depressing illness. My plan of treatment is very simple. I insist upon rigid, systematic bathing and inunctions, and I continue them even until complete desquamation has taken place. I have by this means had the pleasure of witnessing their complete convalescence without a single sequel.

In glancing over the vast literature of the subject, accumulating and growing more unwieldy every year, I am forced to acknowledge that I have nothing new or strikingly original to announce to you; yet I am startled with the vagueness and uncertainty of the instructions given.

Bathing, in scarlet fever (when it is mentioned at all) is recommended by over a score of our best writers, and our latest text books speak of it as a mode of treatment, yet in such an indefinite and uncertain manner as to preclude any real information, or give the busy practitioner encouragement to resort to it; or, if he should, no positive rule as to method, or the exact technique as to the mode of procedure. In the classical work of Thomas Watson, the prince of observers, and the commencement of modern scientific medicine, now over fifty years old, he coyly hints in the treatment of scarlet fever, "that, if the heat of the surface be very great and distressing he should not recommend the cold effusion, but cold or tepid sponging would be very refreshing and beneficial." This statement seems to hold good at the present day in an uncertain and dreamy way among general practitioners, and is the echo found in every work on practical medicine. The battle-cry of sponging in scarlet fever is universal, yet so vaguely is it touched upon by our best writers, I fear it is not practiced at the bedside by the majority of our medical men.

By actual inquiry I have been satisfied that the majority of our medical men do not give their instructions, as a rule, for the thorough sponging of their scarlet fever cases. They know or feel that they would meet with some objections from the family, or if not open antagonism, the order is partly, if not entirely, omitted. This is due to the old and prevailing theory, found among the laity, that fevers require warmth and sweating, and which has so firm a grasp on the general mind that the doctor usually fears that he will not be able to remove it nor gain his end. I know we have ourselves, as a profession, to blame for the reluctance with which our families accept our methods. When we have discovered the beneficial results from some mode of treatment, we are too prone to overreach our mark, and frequently insist upon an unpleasant method. There is no occasion, except in extreme cases, for ice or wet packs. There is no good to be gained by injurious fussiness.

If we quietly, but firmly, insist upon the patient being most thoroughly sponged, daily or twice daily, with carbolized water, one part to 60, or bichloride of mercury, 1 to 8000, or salt water, or alcohol and water at a temperature of 70 to 100 degrees, according to the amount of fever, and should we remain to witness the process occasionally and thus demonstrate at once its utility, we will speedily convert the patient and his family to our way of seeing the great good to come from the treatment.

This, gentlemen, may seem to you as a more than twice told tale, yet if careful inquiry be made I am quite positive that it will appear that your instructions to bathe have been respected more in the breach than in the observance. Systematic bathing and inunctions protect the body from the more disastrous breakers far ahead of the patient—the numerous sequels that may handicap him for life. I feel that this method of treatment is our most certain prevention of ear, nose and throat trouble, and the thorough annointing I believe to be a prophylactic measure against scarlatinal rheumatism.

My method of conducting a case is briefly as follows: I am in the habit of isolating, in an upper room, all of my cases of scarlet fever the moment a diagnosis has

been made. The room is stripped of all possible hangings and superfluous furniture, and it should be large and well ventilated. No unnecessary visiting should be permitted. The nurse, be it any member of the family, or otherwise, should wear a washable dress and should not mingle with the family unless the clothing be changed or thoroughly disinfected. In the room, if it should be a severe case involving the throat, I keep the gas burning, or a small alcohol lamp, so that steam may constantly be generated. In the boiling water, I frequently add carbolic acid or oil of eucalyptus; this saturates the room very pleasantly, and at the same time, I believe, limits the extent of the contagion.

The patient is now thoroughly sponged with tepid salt water, or any of the antiseptics suggested above, three or four times a day, if the temperature should require it. Immediately following the sponging process, I order the inunctions, which consist of cosmoline, menthol and carbolic acid, ten grains of the latter to one ounce of cosmoline, after the plan of J. Lewis Smith. This combination is exceedingly agreeable to the surface, brings comfort and ease to the patient, and at the same time protects the sensitive surface. Carbolized water, 1 to 40, thoroughly shaken together, may be used to sponge the surface and followed by cocoa butter is also very agreeable.

A point I wish to mention is in regard to the proper disinfection of the physician himself, which, I am sorry to add, is frequently neglected. I find that it is unwise for him to visit other cases, children especially, without protecting himself as well as others. I invariably generate chlorine gas and allow it to go through my clothes thoroughly before I go in other families. This simple process I accomplish in a few minutes by placing a drachm of powdered chlorate of potassium in a saucer, and add a similar quantity of hydrochloric acid; this I place on the floor and stand over the vapor of chlorine as it arises until it penetrates all my clothing, then with the free use of the whisk, and a thorough hand washing I feel that I am clean enough to enter home or any sick room non-contagious.

In regard to the strictly internal medication, I prefer phenacetine for older children, combined with quinine, in capsules. Acetanilide for younger children. I generally give one-half as many grains as there are years in the child's life. When medicine can be exhibited in the form of capsules I always prefer to combine it with quinine to overcome the tendency to depression. Phenacetine and acetanilide act charmingly in controlling the nervous element, relieving headache and fever, promoting diaphoresis, and inducing refreshing sleep. Acetanilide acts much quicker than phenacetine, but its effects are much shorter. I, therefore, choose it for young children, and exhibit it in the form of a powder. If the bowels should be to prid, I combine with the acetanilid, small doses of calomel and soda.

Several years ago, I attempted to carry out Professor J. C. Wilson's choral treatment in this disease, but was forced to abandon it. The taste was so acrid and lasting, especially on the denuded tongue, and irritable to the stomach, that I was forced to give it up. I fear that we have in this feature alone its most insuperable barrier. The belladonna treatment as a protective or preventative measure, I do not think has any longer a recognition among the profession at large. Those remedies, purely antiseptic, administered internally, have not given promise of their utility as yet. Sulpho-carbolate of zinc and of sodium which, by their breaking up in the system and liberating carbolic acid, cannot be used in a sufficiently large dose to meet with success. The syrup of phenic acid is used by many physicians, but their success as yet does not seem to warrant it being classed as an efficient remedy.

In my estimation, the most thoroughly scientific treatment of scarlet fever, and the simplest to be found, is in the prophylactic measure of thorough isolation, bathing and antiseptic inunctions, with rigid care and attention to the possible appearance of the many sequels. The care of the nose and throat and, eventually, of the ears, will require all the skill of the medical attendant. I have found it absolutely necessary, if I wish to see my case fully recover without any unpleasant after results, to commence at once, in the early history of the case, to give careful and constant attention to the nose and throat, thus preventing much trouble and danger later on.

I instruct the attendant to use a small atomizer filled with warm water containing bicarbonate of soda in solution, about 20 grains to the ounce. If decided inflammation should occur, I use a solution of peroxide of hydrogen, one part to five of cool water or glycerin, and follow it with an oily preparation, such as liquid alboline containing menthol of five per cent solution. Mulford has a most excellent combination called Blandin compound, which is copied after Carl Seiler's Dobell's tablets, and which has the advantage over the aqueous solution in that the antiseptic remedies are in an oily solution, and are more soothing to the inflamed surface.

If the patient cannot tolerate an atomizer, I frequently make the application of the antiseptic oil by means of an aluminum applicator direct to the posterior nasal spaces. A thoroughly faithful attention to the removal of the secretion of the nose and throat, will prevent accumulation, and hence prevent regurgitation up the eustachian tube, with all its associated ear troubles. In this way I am sure diphtheria can be prevented from gaining its first lodgment; and, if it gains any at all, little trouble is experienced with this dreaded disease. We must keep the already inflamed surface thoroughly aseptic. If, however, pain in the ear should indicate the extension of the trouble up the eustachian tube, we must redouble our efforts. Trouble may take place, not from our failure to remove effete material from the nose and throat, and this, by rendering the inflammatory exudate as little as possible, but the desquamation within the eustachian tube itself may be quite beyond the reach of our detergent wash.

The external auditory canal may become blocked by desquamating epithelium, and this must be removed by gently sponging it out. The crude method of dropping laudanum and sweet oil in the ears is to be condemned, as it serves as a nidus for the collection of dust and dirt, independent of the rapid accumulation of dead epidermis. Since I have given careful attention to the management of nose, throat and ears, as explained above, I have had little diphtheria complicating my scarlet fever, and rarely otitis to confront me later on, as unpleasant sequels.

Scarlatinal rheumatism, I have encountered in but a small proportion of my cases, and then it was of a transient character, leaving no damaged heart valves behind. I am inclined to contribute this fortunate result to the faithful use of daily bathing and inunctions, long continued, or at least until after completion of desquamation. I think this is especially born out by comparing the cases occurring in my private practice within the last five years with those prior to that time, or those less fortunately situated, or those, especially, occurring under my observation in dispensary work.

The last, and most constantly occurring in scarlet fever, is the sequel, known as nephritis. Acute desquamative nephritis is regarded by most writers as a necessary entity, the catarrhal inflammation of the uriniferous tubules bears to scarlet fever the same relation as the bronchial inflammation occurring in measles, and known as acute bronchitis. It is true that the specific poison of scarlet fever is peculiarly obnoxious to the kidneys. It is largely eliminated through them, and here hinges the scientific part of the treatment of this disease; the more active we keep the skin, the less danger is likely to occur to the kidney. If the urine is examined throughout the whole course of the disease we will find in the early stage, that it grows less and becomes more laden with the waste of the body, at times nearly suppressed by mechanical blocking of the uriniferous tubules.

If now the skin is not invited to act to its fullest extent, we will soon find our patient reduced to a comatose state. Free bathing has the happy effect of vicariously eliminating and removes the undue pressure placed upon them. It is unscientific treatment to exhibit digitalis in any form during this stage without taking into consideration the pathological condition. It is like forcing a large cork into a bottle too small for it. Unload the effete material through the skin or bowels and you relieve the damaged kidney. The infusion of digitalis is happily indicated later or when the kidney commences to act.

From what has been thus briefly outlined, I may conclude that in the treatment of scarlet fever:

1st. While we possess no specific treatment for scarlet fever, I am hopeful that we will soon obtain one in the light of our present knowledge; and until we do so,

systematic bathing and inunctions will be found to rescue the largest percentage.

2d. Careful antiseptic treatment of the throat and nose during the whole course of the diseased will reduce the possibilities of diphtheria to the lowest, and render otitis less frequent.

3d. Scarlatinal nephritis may be escaped by the treatment suggested above, combined with a milk or at least a fluid diet.

Finally, it is constantly observed that the unpleasant sequels are cropping out long after the physician has ceased visiting the case. We are indebted to our own indifference for many serious kidney troubles, should they arise, if we do not control our cases for a long time after all acute symptoms have subsided.

SOCIETY REPORTS.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, July 7th, 1893.

THE PRESIDENT, DR. T. L. MCDERMOTT, in the Chair.

Dr. Wm. Bailey presented an essay on

BLOOD PRESSURE.

(See page 277 of REPORTER, August 19th.)

DISCUSSION.

DR. D. T. SMITH: It seems to me by reducing this matter to the underlying principles and following them, we can find an explanation of a great many points that would require a considerable time to elucidate.

The prime thing is the *cell*—the heart is a machine that is worked by the cells of the body through the nervous system, the nervous system acting mainly as the medium. What is it that impels the heart to send the blood through the veins? It is the requirement of the cells! There are few cases in which over action of the heart is not due to this. The exceptions are cases of tachycardia which, in a way not yet fully understood, is an abrogation of the nerve control of the heart inducing over-action. These cases are not very frequent, and I do not know the result of study as to the effect in the production of hypertrophy. In almost all other cases, over-action of the heart is caused by cells calling for an increased supply of blood. Whatever blood is needed is sent to a cell by the heart through the operation of the reflex apparatus, the cells calling upon the nervous system and the nervous system in turn compelling the heart to exert itself. The channel of the blood becomes more and more sensitive from the time it leaves the veins until it passes again into the capillaries; the right auricle is less sensitive than the right ventricle, the left ventricle less sensitive than the left auricle, the intima of the small arteries and arterioles being the most sensitive of all. The blood meets with increasing sensibility of channel wall until it reaches the arterioles which in some curious way, are commissioned to control the supply of blood to the cell. If the blood is normal and pure, the arterioles present slight tension, the blood flows quietly on and we have an even circulation. But the blood may be defective, may be poisoned from some cause. In that case the cells are displeased with it; the arterioles, acting upon this suggestion, close against it, while at the same time the cells are calling lustily for blood, The brain answers by compelling the heart to overwork itself to send the blood, and this is the foundation of nearly every case of hypertrophy. Hypertrophy is the natural result.

There may be another exceptional cause of over-work, as is in the case of an athlete, where the contraction of the muscles on the veins accelerates the circulation, but even here it is mainly because over-worked cells require an excess of blood that the heart is over-worked in supplying them. Again the blood may be too thin, as in cases of anemia, and the heart is overworked because the cells demand that deficiency in quality be met by increase in quantity.

As a rule it is not the heart that carries healthy blood, but the one that carries defective blood that works more than it

should, notwithstanding that on all physiological grounds the heart ought to work less on bad blood. It would seem that in anemia, Bright's disease and pregnancy the heart ought to decrease in size instead of increase. But whenever the system is insufficiently nourished, it compels the heart to do more work and the question is just how far we ought to keep that up, how far we ought by therapeutic measures to goad the heart to increased action, when by so doing we are assisting to produce hypertrophy.

It is true that excessive action of the heart means, as a rule, increased blood tension. But we know that over-action of the heart does not always mean increased blood tension. The force may be wasted before the pressure reaches the arteries and arterioles. We may have an exceedingly hypertrophied heart and still have a soft pulse—still have defective blood tension.

So long as the system and the tissues call for blood, they need it and must have it or there is a lack of proper nutrition, and the natural conclusion is that no man with a hypertrophied heart is in good health. No man is in perfect health where the supply is not ample, or where the system is calling for more. The horse is not spurred when the rider is pleased with his gait. To prove that nutrition is never complete a man who has hypertrophy of the heart to an appreciable extent will always give out quicker than one who has no heart trouble—other things being equal.

As to the particular method of medication we should use in these cases, it seems to me if digitalis is to be given it should be in small doses continued for some time. I think better results can be obtained in this way than with large doses for a shorter time. Some writer on this subject claims that better effects can be produced with large doses of digitalis but I do not believe this is borne out by facts, at least it has not been so in my experience. However, I would be slow to give digitalis at all until nature should give up the task of effecting compensation.

A word as to relative tension: When tension exists under ordinary conditions we have usually, an over-strength of the heart, but certain conditions may have the internal tension increased with a weak or weakling heart due to contraction of the peripheral capillaries.

As to the result of tension upon the respiration: It is well known that a failing respiration is revived by blood pressure. All of us have watched, often with very painful interest, at a death where circulation at the wrist is imperceptible, extremities cold, where there is no sign of circulation except the slight beating of the heart, and wondered why the first rapid pace toward death is not continued. Something like it is also seen in cases of shock. A person receives an injury, or there is some marked impairment of vitality which renders the heart incapable of keeping up the circulation of blood to the entire system. As a result nature closes the external capillaries, which forces the blood back upon the brain and heart. The tissues of the extremities can very easily do without blood for a long time; the brain and heart cannot. The brain needs the pressure of the blood. The blood is prevented from circulating in the extremities in order that a relatively increased tension may affect the brain and keep up respiration. We can often assist in bringing on conditions of this kind by turning the patient and lowering the head; sometimes even by reversing the position of the patient, arresting the circulation in the extremities and forcing the circulation into the brain, which produces a condition similar to shock. Shock, indeed, may be regarded as the diminutive of death.

Dr. F. C. Wilson: I think too little attention is paid to the pulse since the introduction of the thermometer. The pulse and the tongue the older physicians used to watch constantly, perphaps selecting their medicines guided by the conditions they found there. I believe these are now often neglected. We simply put the theremometer under the arm and judge by the temperature, perhaps never feeling the pulse at all. Of course the pulse indicates, to a certain extent at least, the actual blood pressure. If we could apply different instruments for measuring blood pressure, it would be more satisfactory, but the practical physician has not time to do this and it can be done only in the laboratory of physiological science. Pressure is not influnced by the force with which the heart propels the blood current alone. Sometimes some of the influence of the force of the heart's action is lost thorough the insufficiency of the

several valves of the heart. If a valve curtain fails to fit properly, part of the force of the current is expended in a regurgitant flow and thus lessens the pressure upon the onward current in the arterial system. When conditions of this kind exist they must be taken into consideration in the selection of remedies, and one may sometimes find it necessary to increase the dose in order to accomplish the desired end. The character of the capillary circulation must always be considered, as much harm might be done by goading the heart to increased action when over-distended because of obstruction in the capillary system, or because of regurgitation that may have occurred incident to insufficiency of the valves. If the chambers of the heart become over-filled and we attempt to cause contraction, it may sometimes bring about a fatal result. I think I have seen instances where sudden death occured from large doses of digitalis under such circumstances. The administration under such conditions of the nitrites and atropia, causing the dilation of the arterioles and capillary system through the sympathetic nervous system would be more rational and we could relieve the over-distended heart in this way. The passage of the blood current through the capillaries depends very much upon the condition of the blood itself and the relations between the blood and the tissues themselves. In the tissues that need blood, if the blood that is brought to them is good, an active interchange of material takes place and the blood current is hastened. On the other hand, if abnormal relations exist between the tissues themselves and the blood, there may be narrowing instead of dilatation, and obstruction produced. Instead of mechanical obstruction as occurs in obstruction of the arterioles, there is a species of obstruction for want of proper mechanical relation between the tissues and the blood current itself, which produces a delay in the circulation. Remedies that act directly upon the heart or directly upon the capillaries, would not relieve such a condition. It depends upon the blood itself.

Dr. J. A. Larrabee: There is a tension necessary in every atom of the body; with the preservation of tension in these atoms we have life, and separation of these atoms is indicative of dissolution. In fact, the relaxation which occurs is simply the giving up of the tension of the atoms; so that when life exists there *is* a normal tension of these particles, particle to particle, and in this we have an explanation of cell action. The matter of blood tension is important as regards the absorption of medicines. I think it would be well if we would give this matter its full bearing by saying that when we have a normal blood tension we may expect the absorption of medicines. The idea should be to administer drugs which will control the osmosis without which we cannot have a proper absorption of medicines in the system. The nerve supply to the heart, coming as it does from two sources, gives us two sources of failure. Since I have studied this question more closely I have found a great many cases where such disturbances have been on the other side, i. e. through the pneumogastric; cases where this failure was plainly accidental. We have here a change in the tension by the check nerve, an over filling of the ventricles, and where this is taken off we have excitation without the proper proportion of blood. In atheromata we have a lessened arterial tension and see what a wonderful change takes place in the heart muscle, how it becomes degenerated—pari passu with the changes in the arterial coats. This is a life saving change and I cannot think that we want increased tension in such a case. With increased arterial tension we get increased cardiac nutrition, hency the wonderful action of digitalis which should be limited to actual patulency, or lesion of the valves of the heart, and then only given up to the point of compensation. Fatty degeneration of the heart is a condition of reverse compensation and must be looked upon as conducive to the prolongation of life of the individual by protecting him from apoplexy.

In cases of Bright's disease I think we have the best example of what we mean by arterial tension increased by materies morbi circulating in the blood. There we have a plain exhibition of the contracted condition of the arterioles down to such a point that the heart in its endeavor to relieve becomes hypertrophied. The illustration goes further than in Bright's disease. There are many similar conditions; we have a stage in the course of fevers, and I speak especially with reference to the great fever, typhoid, where we have a condition of paleness of the skin with high temperature. Now, I think that

very many of our appliances and very much of our therapeutics are in fault by these cases. There is a condition in the course of fevers in which the dilatation by paresis of the check nerve, pneumogastric, gives the relief that we desire. Here there is a call for nitroglycerine or atropina. I have seen such remarkable results from the administration of belladonna by the mouth to relieve the tension, but far better results may be obtained by a distinct dose of atropina hypodermatically when there is this condition of shock, which it really is; the paleness of the skin being relieved not by forcing the heart to overcome that resistance, but to aspirate the heart by dilating the vessels. I do not fear high temperature with redness of the skin as I do high temperature with paleness, and I believe this is the key-note to hydrotherapy.

In regard to agencies for restoring nerve action when it is diminished either central in the heart or central in the brain. We have means of stimulating the vessels, and only recently since the last paper was read I have had an illustration of carrying strychnia to the extent of $\frac{1}{12}$ of a grain, which was carried gradually to that point and not until I reached $\frac{1}{12}$ of a grain did I get the result desired. I believe that strychnia is one of the greatest agents known for threatened cardiac paralysis in fever, and I think it should be classed under the head of cardiac stimulants. This whole subject of arterial tension is one of which the general practitioner cannot know too much, and I can only regret that I have passed so many years of practice in the early part of my life without paying any attention whatever to it, and I believe others are of the same opinion. It is now with me as I believe it is with Dr. Bailey, and others who have spoken, in all the cases I pay particular attention to the pulse and arterial tension, and regulate my therapeutics upon this basis. Not by temperature alone but by pulse ratio compared with temperature.

DR. J. B. MARVIN: It is very hard sometimes to separate arterial tension from conditions of the heart. It seems to me there are two points that should be borne in mind at the outset. First, that causes outside of the heart may as well as hypertrophy give rise to increased tension, or causes intra-cardial may give rise to hypertrophy, but there is always defective action, then gradual dilatation and lowered tension. It is a curious fact, that Bright's disease is almost always associated with hypertrophy of the heart and increased arterial tension.

All troubles that have a poison circulating in the blood may cause increased arterial tension at the time, and cause an over-action of the heart. If one narrows the point down to the fact that nobody having slight hypertrophy of the heart is healthy, I do not believe you will find many healthy people. There is certainly a difference in individuals in regard to arterial tension. In children there is a marked increase of arterial tension, but you cannot make out any hypertrophy.

In regard to digitalis, I think I give less of this drug every year I practice medicine. I am satisfied that there are a great many conditions of the heart where digitalis is contra-indicated. In certain other conditions I believe it is our best so-called cardiac remedy. In Bright's disease I doubt very much digitalis is beneficial. It is fashionable to give the infusion—I think we have better agents. Certainly by the administration of digitalis in interstitial nephritis, we are goading the heart to increased action which has its effect upon the kidney, and we have already an excessive flow of urine. Why should we want to increase that? I believe a better result may be obtained in renal troubles by administration of the nitrites. In pneumonia I do not give digitalis at all and have not for a number of years. I give nitro-glycerine very frequently and I have prescribed it in $\frac{1}{100}$th grain doses every twenty minutes.

In typhoid fever and pneumonia I rely less upon the thermometer and more upon the pulse. I think we should keep a close watch on the pulse, should feel it frequently at the heart rather than at the waist, as we may be misled. If the pulse keeps below 100 or 120 to the minute, in a person of middle age in typhoid fever, I do not care what the temperature is. The pulse in pneumonia that alarms me most is the one that gets quicker every day.

DR. WM. BAILEY: I have very little to say in closing. I did not of course enter into an elaborate discussion of this question, hoping to bring out some such discussion as we have heard. I did not refer to disturbance of tension as coming from diseased valves of the heart, where regurgitation is permitted. We all know the benefit of digitalis particularly in mitral

insufficiency; nor did I refer particularly to such diseases as so-called Bright's disease in which the tension is very greatly increased. For a long while I have been of the opinion as expressed by Dr. Martin, that this form of so-called Bright's disease was not difficulty in circulation limited to the kidney but that the changes in the kidney, the growth of fibrous tissue, was at the expense of other organs as well; that the trouble was a universal one. Certainly it is this form in which we of necessity have hypertrophy.

The point I wanted to ask particular attention to was that it was sometimes more rational to modify the condition or size of the vessels than it was to endeavor to accomplish the work through the heart handicapped in this way. I presume the word "Handicap" is understood by all Kentuckians—the best horse is made to carry the most weight in order to give the "scrubs" a chance of winning the race. In other words in my opinion it is better to dilate the blood vessels by proper medicines than to endeavor by increasing the power of the heart to force it to carry the blood through the contracted capillaries. This was the point I wished to make in the paper by asking you to consider the physiological action of digitalis and the nitrites. I believe a proper administration of the classes of drugs represented by the two mentioned—digitalis and nitroglycerine—will bring as good results as any medicine that I know of. I am fully satisfied that often times we could do very much more good by opening or dilating the capillaries, thus increasing the size of the vessels through which exit is made, rather than by stimulating the heart to increased power. We see this most markedly, I think, in such diseases as angina pectoris, where the tension is very greatly increased and the relief of nitrate of amyl is universal. The good effects are noticeable by the first inhalation of nitrate of amyl in the phenomena we call angina pectoris.

I am not inclined to express myself as fully and freely as others have done in regard to the use of digitalis. We cannot solve the problem in a single discussion, and we should carefully study the heart's action, administering remedies which will best assist it in performing its duty. In writing my paper I did not enter into minute details in regard to the proper amount of blood that each portion of the body should receive, nor follow the matter still further and see it was received. I think every day we should be more and more inclined to study the natural causes of disease in getting a clear indication for treatment; taking all these questions into consideration I believe we will make more satisfactory progress. I think that the outlook for the general practitioner is bright, notwithstanding we have not kept pace perhaps with the surgeon in many years.

Dr. D. T. Smith: Why do you think that nitrate of amyl acts by relieving the general tension when, by dilating the arterioles and capillaries, you allow the blood to get back into the capillaries of the heart muscle itself, reviving its strength and removing the pain probably due to the privation of blood.

Dr. Wm. Bailey: It may be from widely extended influences. In conditions of this kind one of the most prominent difficulties we have to deal with is the contraction of the blood vessels. The tissues are requiring more blood, a great amount is being forced upon the arteries and arterioles by the heart, yet the tissues are unable to get it owing to the contraction of the vessels, and the most rational treatment would seem to me to be to dilate these channels, allowing the parts to obtain blood in the natural way.

There is no question but the medicines used in controlling blood tension act largely through the influence of the nervous system. In the first place, digitalis stimulates the heart to increased power; it increases inhibition of the pneumogastric, but, unfortunately, in some cases it likewise contracts the capillaries; whereas, nitroglycerine and the other nitrites, increase the heart's power without contracting the capillaries, thus relieving the pressure. Where you have heart pressure under such circumstances, nitroglycerine is much better suited to the purpose of assisting the circulation than is digitalis; but where digitalis is indicated in some forms of Bright's disease, where there is difficulty in elimination of urine from the kidneys, it is the remedy of all. Under such conditions I think the infusion of digitalis and acetate of potassium will produce relief quicker than any other means. But to say that we should give digitalis for everything where the heart is involved, I think would be very bad practice.

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SATURDAY, AUGUST 26TH, 1893.

EDITORIAL.

INEBRIETY AND ITS TREATMENT.

We invite attention to the article on *Inebriety*, by Dr. Wigginton, of Wisconsin. The magnitude and far-reaching consequences of this great evil are therein clearly apprehended, and the difficulty of its successful treatment realized.

We have recently seen elsewhere a distinction which wou'd help the diagnosis and treatment of inebriety. That distinction draws a broad line between the *drink habit* and the *drink traffic*. Inebriety, as a disease, is of the former, and not of the latter unless it be of the body politic. The treatment of inebriety, as a disease of the *individual*, is for the medical profession. The treatment of the drink traffic as a disease of the State is for statesmanship. Both are proper subjects for study and discussion, and the education of public sentiment, and should be conducted on right lines. If, as Dr. Wigginton has so clearly and properly pointed out, "prevention is vastly superior to cure," and "our first duty is in the line of prevention," and "the presence of alcoholic beverages throughout the length and breadth of our country" is one of the most potent, exciting, or direct causes of inebriety, under the law of environment, is it logical,—is it scientific to suggest that "a license sufficiently high to control its sale is the only way out of the difficulty?" Does experience anywhere suggest just how high license needs to be to control its sale sufficiently to prevent this exciting cause of inebriety? License has been tried all the way from fifty to five thousand dollars and inebriety and its existing cause have continued without abatement all along the line.

Does medical science suggest parallel remedies for other diseases? Are our health authorities now treating the threatened invasion of Cholera and Yellow Fever on this plan? Everywhere the most energetic measures within reach are employed to stamp out their first appearance. If it be wise for statesmanship, in dealing with the liquor traffic as a disease of the body politic, or as the chief exciting cause of disease among its citizens, to continue and protect by law the "presence of alcoholic beverages throughout the length and breadth of our country," why not

recognize and protect the presence of the exciting causes of other diseases? If "the right living public have rights that the evil-doers must respect" and "to prevent the propagation and spread of this evil the State should have a guiding hand," then why should not the State employ its power in stamping out this disease as well as others? Why should the State license and "regulate" the exciting cause, and then establish and maintain hospitals and asylums for the treatment of the disease? True, inebriety is a disease, but the *manufacture* of, and *traffic* in intoxicating beverages that produce it, *is not a disease.* Inebriety is a form of insanity, but liquor makers and vendors are not insane. The two classes,—the disease-producer and the diseased,—are as widely separated as are the physician and his patients,—the disease healer and the diseased.

These and other queries will seem to the physician, who, accepting inebriety as a disease, knows the hopelessness of its treatment while its cause persists in vigorous existance, to demand more rational and scientific treatment.

Let the medical profession and our statesmen and all good citizens study this subject in the light of reason and common sense, and let the several sections of our country in which the various remedies have been tried, be carefully studied as to the persistence of the exciting cause under diverse treatment, and let the lessons be applied, and we may come to that condition of public health which will give relief alike from cholera, yellow fever, diphtheria, *inebriety* and all destructive diseases.

Since the Government has had such gratifying success in preventing thus far the invasion of cholera and yellow fever by the improved methods which medical science has suggested, why should not Congress at once yield to the reasonable demand which has been urged for almost a quarter of a century and appoint a Commission to inquire into the causes and cure of inebriety? No thoughtful citizen can read Dr. Wigginton's article and fail to see that this is a most important and promising field for such inquiry; and yet while one branch of Congress has repeatedly passed the measure the other has as often defeated it. Why? It surely is not because the subject is not of sufficient importance. Neither is it because the public health and morals are not involved; nor because it does not concern the material prosperity of the country. As a mere question of finance it is of far greater magnitude than the government purchase of silver bullion, or any possible change in the tarriff. Do any dissent? Then why not create the Commission of inquiry? It is not because the information is not accessible. It is, in every possible relation to the subject. Inebriety is an old disease, and yet but recently recognized as a disease, and even yet there are many who do not so regard it. All sorts of remedies have been tried by scientific, and quack statesmanship, and the most conflicting reports of results fill the air. Why not have a Commission of able, scientific gentlemen who will search out and set in order the real facts as they relate to causes and cure? The best talent of the medical profession and the best statemanship the country affords should be represented on such Commission, and the best facilities which the Government can provide should be given it; and then its labors should be consecrated by a devotion to science, philanthropy and patriotism superior to all mercenary and party considerations. Let us have a *Commission on the causes and the cure of inebriety.*

XI. International Medical Congress.

In consequence of the sanitary condition of several of the European States, which prevents their medical men leaving home, and, following the advice of many prominent scientists, both Italian and foreign, the Executive Committee of the above Congress has decided, by a large majority, to postpone the meeting till April, 1894. The exact date of the Inauguration will soon be fixed.

ABSTRACTS.

EARLY TREATMENT OF THE INSANE.

In a paper read before the American Medical Associations on this subject Dr. D. R. Brower states that he desires to call attention to this important topic before this learned and experienced body hoping to give rise to a discussion that will result in great benefit to the general practicioner by marking out the most useful line of practice for the insane, in the first stage of their disease. It is well to make the statement emphatic that the great majority of insane require as speedily as possible that peculiar care and treatment which can only be had in a well-organized hospital for the insane, but there must necessarily be in every case delay of a few days or a few weeks before the necessary arrangements, legal and otherwise, can be made that will secure for them this desirable treatment, and in this paper we propose to consider what shall be done for them during this period.

Some cases of insanity undoubtedly have their origin in auto-infection, and the violence of the manifestations, and sometimes the duration of the disease, can be modified favorably by careful attention to gastro-intestinal disinfection; so that it is well for the attending physician to carefully investigate the condition of this important canal. Colonic flushings with boracic acid, creolin, or even with sterilized water, and the internal adminstration of salol, salophin, the salicylate of bismuth, or some other gastro-intestinal disinfectant may be most judicious treatment. Some cases of insanity undoubtedly owe their origin to faulty elimination by the kidneys, bowels, and skin. It is therefore the duty of the family physician to investigate the condition of the renal secretion, not only as to the question of the presence of albumen and sugar, but as to total solids in the urine, and the relief of these conditions by appropiate treatment, alkalies and colchicum if you please, will sometimes improve the mental condition of these patients. Insufficient elimination by the bowels is a very common accompaniment of insanity in its various forms, and laxatives and enemas are often indicated and should be early administered. Cascara sagrada, the occasional use of calomel from three to five grains at bed-time, followed by a saline laxative in the morning, various laxative waters and after free evacuation of the bowels, then gentle impression on the tract by alœtic preparations will correct the intestinal insufficiency. The condition of the skin is often very deficient; warm baths, wet pack, and judicious massage will stimulate the functions of this important emunctory and be of service to the patient.

The attending physicians should give early attention to the question of feeding. In cases of mental depression, as well as in cases of mania, especially in the former, the amount of food consumed is altogether inadequate to maintain the ordinary nutrition of the body, much less to correct the deficient nutrition upon which the insanity often depends, and if the patient cannot be induced to eat by persuasion a liberal amount of food highly nutritious and easily digestible, early resort should be had to nutritive enemas, supplementing the insufficient food taken by the mouth by pre-digested foods used as enemas, and if the state of the mind of the patient is such as not to permit the use of these two methods of feeding, then early resort should be had to forcible feeding, by the nose, and this is so easily accomplished by the physician and his trained nurse, that it should not be omitted under the circumstances indicated. This forcible feeding should be done at least twice in 24 hours, and the largest quanity of the most nutritious combination of foods should be thus administered. Milk, cream, eggs, beef extracts, extract of malt, alcohol or some of its preparations, and such medicines as the patient may require, may thus be made into a common mixture and administered. I know of no more important indication connected with this matter of first care and aids to the insane than to see to it thata superabundance of easily digestible and highly concentrated nourishment is supplied.

The next important consideration is sleep. Careful attention should be given to securing in a proper manner and in

proper quanity this valuable aid to treatment. In proper manner, by selecting such agents as do not disturb the general nutrition. In proper quanity, for it is bad practice to keep these patients constantly under the influence of any narcotic; the aim should be to secure only a reasonable amount of sleep in the twenty-four hours, as, for example, eight to nine hours. These are difficult considerations to secure and enforce, but they are of great importance. In its consideration it may be well to divide the cases clincally into those that are characterized in their beginning by depression and those that are characterized by exaltation. For the depressed cases certainly remedies of a depressive character are not indicated; therefore, I should object to the use of the bromides and chloral in the treatment of the insomnia in this class of insane patients. I prefer in these cases hyoscine hydrobromate a drug very easily administered, being tasteless; the dose can be easily administered in any ordinary article of diet without the patient being aware of it. Next to hyoscine hydrobromate I should place somnal as an efficient and not depressive sleep-producing agent, and I have found that the formula proposed by Dr. Spitzka of New York is a valuable one in the administration of this drug. He combines the somnal with glycerin and elixir of calisaya about as follows: Somnal, drachm iii; glycerin, drachm viii; elixir calisaya, enough to make four ounces. Dose, tablespoonful at bedtime. This may be repeated in from one to two hours.

Chloralamid and sulfonal are also excellent hypnotics. Opium is often a remedy of service in the early stages of melancholia. A good preparation of deodorized tincture of opium or codeine in full doses will not only often promote sleep, but will relieve the patient of the intensity of mental anguish during the twenty-four hours if given in repeated doses. If these several remedies fail to produce sleep in melancholia, it may be neccessary to adminster chloral hydrate. If so, the chlorate hydrate should be guarded in its depressing influences upon the circulation by the administration with it of either hyoscine hydrobromate, the tincture hyoscyamus, or the tincture cannabis indica.

In producing sleep in ordinary conditions of the exalted type of cases, a combination of the bromides with chloral hydrate will usually give the best results. From 15 to 10 grains of the bromides, potassium or sodium, with a like quantity of chloral hydrate, repeated, if necessary, every hour, will in from one to three doses produce a sound and refreshing sleep, especially if the soothing effects of these remedies have been preceeded by a hot bath with a cold compress to the head. In some of these cases of mania a combination of sulfonal with potassium bromide will sometimes produce even better sleep with less depression the ensuing day than a combination of bromide with chloral. Chloralamid and potassium bromide, 15 grains each, is sometimes a good combination to produce sleep in cases of mania. This produces even less mental disturbance the following day than either of the combinations already mentioned. Where there is in mania feebleness of the capillary circulation, it is well to add to any of these combinations that may be selected full doses of the tincture of the cannabis indica, sleep then following with less disturbance of the general nutrition.

In some forms of insanity it may be necessary for the physician to fulfill some special indications of treatment, as in puerperal insanity. It is here the duty of the attending physician to carefully consider the condition of the uterus and its annexes. These important organs may require special treatment, the condition of the lochia requiring disinfectant treatment, not only of the vagina, but of the uterus itself. The condition of the breasts should also be looked into. In the forms of insanity that develop out of puberty, various sexual derangements are especially to be considered. Masturbation both in young men and young women is probably not a cause of the insanity, but a consequence of it, and yet every possible method should be resorted to to prevent it. The laity are especially concerned about the suppression of the menses, the popular opinion being that suppression of the menses has been the cause of the insanity. While suppression of menses may, by stopping this wonderful purifying process in women, causing the retention in the body of excrementitious material, thereby intensifying the insanity, and the restoration of the menstrual epoch, if it is possible, might be of service to the patient, yet, as a rule, a the suppression of the menses is not causitive

but consequential, and they will continue suppressed until the functions of the central nervous system have been restored; and the effort that is often made by the attending physician, urged by friends of the patient, to administer remedies that are supposed to have effect in retoring menstrual function is of serious injury to the patient. Very many of the laity think that travel is of benefit, and they urge this treatment but I am convinced that it is exceptional that any benefit arises therefrom. When the patient is improving, however, when restoration is under way, then judicious traveling is often a wonderful aid towards the rapid consummation of recovery. — *Medical Standard.*

NATIONAL HEALTH SERVICE.

Gratifying to every sanitarian as must be the success of Surgeon-General Wyman in securing the co-operation of the State Health Officers, under the new quarantine law, it is none the less evident that the census of medical opinion throughout the country is that a more comprehensive law is necessary.

The reports of the committees of the American Medical Association and of the New York Academy of Medicine urge national legislation to the same end, but by widely different methods. That of the Association is persistent, though twice refused consideration by the Senate Committee of Epidemic Diseases and generally disapproved by practical sanitarians.

The proposed bill by the Academy is surprising, considering the committee, some of the members are well recognized sanatarians known to be familiar with state and national sanitary efforts. It comprehends the same discordant and ultimately destructive elements of the whilom National Board, and almost ignores the State Boards of Health—leaves their recognition to the President of the Commission—and seems by elaborateness to provide against their necessity.

We believe that a much better proposition would be:

That there shall be established within the Treasury Department a National Board of Health, to consist of seven members, all of whom shall be sanitary scientists, appointed by the President, by and with the advice of the Senate, shosen one each from the Judicial Districts of the Supreme Court, who shall devote the whole of their time to the duties of their office, and who shall receive salaries of five thousand dollars per annum. There shall be an Advisory Council of the Board, consisting of the Surgeon-General of the Army, Surgeon-General of the Navy, and the Supervising Surgeon-General of the Marine Hospital Service, and the Executive Officers of the State Boards of Health, who shall be required to meet with the National Board at least once a year, and as much oftener as the President may direct for council and advice; but the members of the Advisory Council, being salaried officers, shall receive no compensation other than their travelling expenses.

That the members of the Board shall meet at such time and place as may be designated by the Secretary of the Treasury, and organize by the election from their own number of a President and Secretary; and the Board shall proceed to appoint and equip bureaus or special departments and make all needful rules and regulations for their control, and for the guidance and discipline of all their employes; and shall establish all rules and regulations for the government of national sanitation in its interstate and international relations, in the enforcement and provisions of this Act.

All questions of law shall be referred to the Department of Justice.—*Sanitarian.*

Stubborn Neuralgia.

℞

Arsenici iodid	gr. j.
Ext. belladon., Morph. valerian	āā gr. viij.
Pulv. ext. gentian	gr. v.
Ext. rad. aconit	mv.

M.—et ft. pil. no. xl.
Sig.—One, two or three every twenty-four hours.

An Alkaline Linctus.

℞

Tincturae Scillae	m v.
Ammonii Carbonatis	gr. 1-6.
Essentiae Anisi	m i.
Boracis	gr. ¼.
Mucilaginis Acaciae	m xxx.
Aquae ad	ʒj.

Misce et fiat linctus.
A teaspoonful to be sucked from a spoon when the cough is troublesome.

SALOL AS AN INTESTINAL ANTISEPTIC.

Dr. E. Mansel Sympson states in *The Practitioner* for August 1893, that the action of salol in the human body is now well known and is briefly as follows. After having been swallowed and passed through the stomach unchanged, it is split up in the duodenum by the pancreatic juice into its constituents, salicylic acid and carbolic acid. Their action will be alluded to more in detail later on, but it may here be said that they are thrown out of the body partly by the kidneys (the urine not infrequently being blackened by the carbolic acid) and partly by the intestinal tract in the fæces. And from experiments on dogs whose pancreases have been extirpated, there seems to be reason to think that salol can be absorbed from the intestine without the intervention of the pancreatic juice. As to its action on digestion there are different opinions, some authorities say that it unsettles the digestive processes, and that it actually sets up gastric trouble. These statements refer to its action in typhoid fever, which will be mentioned presently; other observers have however noted directly the contrary results. I have personally taken salol in five-grain doses three or four times a day, both before and after meals, when I have been perfectly well, without experiencing the slightest interference with digestion or appetite. The following experiments will show, however, that salol does appreciably affect the different digestive ferments so far as regards their rate of action.

Experiment 1.—Ten grains of arrowroot were boiled in two ounces of distilled water, cooled down to 100° F., and ten minims of Bleasdale's pancreatic essence added. The solution became perfectly clear. When one grain of salol was added before boiling, the starch required twice the amount of pancreatic essence, and an hour's more time (being kept at the same temperature), before the conversion was complete. If the salol was merely added with the essence, it made no difference. The same results followed, only less marked, from the use of half a grain of salol.

Experiment II.—Five grains of boiled and finely chopped up white of egg were pounded up with the following mixture: Benger's liquor pepticus twenty minims, dilute hydrochloric acid ten minims, and two ounces of distilled water. For four hours this mixture was kept at a temperature of 100° F. The albumen had entirely disappeared, and the mixture gave evidence of containing peptones. The addition of half a grain of salol checked the process considerably, at the end of the same time there were several fragments of egg undissolved, and two or more hours were required for complete dissolution. Both these sets of experiments were frequently repeated and the results were distinct and constant. [1]

Before finishing this brief account of salol, it may be said that it has been accused of producing herpes, and of increasing the delirium which frequently occurs in the course of typhoid fever. I have not noticed this latter myself either in that complaint or when I have used salol in cystitis.

In normal digestion the semi-digested acid chyme is poured out from the pylorus into the small intestine, to be exposed to the influence of the bile and pancreatic juice. These complete the digestion of the various food-stuffs, and some of the products of this digestion are due to the micro-organisms which are present in the intestine. Their work seems to be modified or kept in check by the presence of bile, for, as Foster remarks, "Bile possesses some antiseptic qualities. Out of the body its presence hinders various putrefactive processes; and when it is prevented from flowing into the alimentary canal, the contents of the intestine undergo changes different from those which take place under normal conditions, and leading to the appearnce of various poducts, especially of ill-smelling gases." [2]

The stomach undoubtedly is responsible for some cases of dypepsia, where the chyme is passed on to the intestines in an imperfectly prepared manner, which produces duodenal disorder. But in the

1 Similiar experiments made with salicylate of sodium showed that this drug had no action in pancreatic digestion, but about the same as salol in peptic digestion.

2 Foster's *Physiology*, 1889, p. 425. Also see a very interesting paper by Professor C. S. Sherrington, "The Escape of Bacteria with the Secretions," *Journal of Pathology and Bacteriology*, February 1893.

following class of cases we have, I think, evidence that occasionally the secretion poured into the intestine are at fault. The patient is probably of a "bilious" temperament, he may have a clean tongue with great loss of appetite and consequent loss of flesh; no pain during a meal, but coming on about two and a half to three hours after. Very likely he is constipated and when his bowels are relaxed the motion is greyish white. As a rule, he will not suffer from nausea, only a little retching sometimes, and instead of the gas being acid, as it so often is, it may be quite alkaline and 'soapy,' as a patient once told me. The seat of pain is the lower part of the abdomen, and is relieved by passing wind. There will perphaps be a slight yellowness, hardly amounting to actual jaundice. These cases belong, I believe, to the same class as those described by Dr. Allchin in his lectures on duodenal indigestion. I also believe that the symptoms are due to excessive and faulty fermentation in the small intestine owing to alteration in character and amount of the ordinary digestive fluids, more particularly of the bile. I have given dilute nitrohydrochloric acid to these patients, sometimes combined with liquor pepticus, to help the stomach to do its work properly; but it has made little or no difference in their condition. And opium in any form by the mouth has not given that speedy relief which it does in gastric affections. So, latterly, I have been in the habit of beginning with four or five grains of calomel, and following it in an hour or two's time with ten-grain doses of salol every four hours. This, to use the language of a somewhat enthusiastic patient, "acts like a charm" when taken about one and a half hours after meals. The pain ceases, the swelling of the abdomen does not appear, the appetite improves, and more important still, the wasting (due, I presume, to the non-digestion of a large part of the food) departs.

Another complaint wherein I have found salol exceedingly useful is a form of infective diarrhœa. Some months back I saw a family in a village near Lincoln who all had diarrhœa, passing dark-brown watery stools five, six, seven, or eight times in the twenty-four hours, attended with severe abdominal pain. In a few days several of the inhabitants of the village were seized with the same complaint, and every one had been into the first-mentioned house. Several more got it from the second source of infection. I regret that I was unable to discover any probable origin of the disease. I tried opium alone in some of the cases, but its action was far inferior to that of salol, whether combined with opiates or not.

In cases of ordinary diarrhœa, too, there are few remedies which more speedily check the flow and the pain than two-grain doses of salol. Some years ago, in the *Lancet*, I advocated giving glycerine of borax in the diarrhœa of infants, believing that undue fermentation in the intestines was the *fons et origo mali*. It does answer well, as I have over and over again seen; but I prefer in the severer cases to use salol in doses proportionate to age, as being a little more certain, more antiseptic, and almost as agreeable to take.

Lastly, I have been using salol exclusively in typhoid fever, not so much on the idea of combating the specific poison, but of cleaning and keeping clean the intestinal tract, and so subduing the irritation of the glands of Peyer's patches and other ulcers there, and that caused by the secretion from these ulcers in the intestine. Salol also prevents the excessive formation of wind, which is sometimes such a vexatious trouble to the patient. Salol brings the temperature down generally one or two degrees, causing abundant perspiration (this can be readily combated by giving oxide of zinc, tincture of belladonna, and some quinine in a mixture), reduces the number of stools from twelve or fourteen in the twenty-four hours to three or four, and when they are offensive, deprives them of any odor whatever. No bad effects were noticed with regard to its action in producing delirium. Its use was continued in typhoid fever for about a week after the disappearance of diarrhœa. It was always given in ten-grain doses suspended by means of compound tragacanth powder, at first (in typhoid fever and other complaints) every few hours, then every six, and for the last week three times a day. It was always given after food.

A Soothing Ointment for Eczema.

℞

Bismuthi Oxidi	3j.
Bismuthi Subnitratis	3j.
Acidi Oleici	3j.
Ceræ Albæ	3ij.
Adipis Lanæ	3x.

Misce et fiat unguentum.
Apply to the affected parts.

WHAT IS THE VALUE OF THE SALICYLATES IN RHEUMATISM?

Many members of the profession will at once answer the question which heads this editorial in favor of salicylates. Yet there are others, who are able to quote large statistics and wide clinical experience, who will state that they believe that the general confidence in the value of the salicylates in acute articular rheumatism is not justified by the results which are obtained from its administration.

Probably the correct solution of this mooted point lies in the subdivision of the action of salicylates on the various parts of the body. Under such circumstances there is no doubt that the universal experience has been that salicylic acid or its salts produces a subsidence of the pain and swelling in the joints which are affected by acute articular rheumatism, and that this result may be accomplished after but three or four doses, or certainly by the third or fourth day. On the other hand, the collective investigation committee of the British Medical Association found that the average duration of pain was a little over ten days, while a collection made from the cases treated in the London hospital barely exceeded five days. Be this as it may, the results of both these investigations, which aggregated something like twelve hundred cases, showed that the drugs caused an amelioration of the joint-symptoms. Similarly, salicylic acid produces reduction of the fever, and in many instances the febrile process, under its influence, only persists for two or three days. On the other hand, it must be remembered that every now and then we meet with cases in which the joint-symptoms and the fever resists all doses of the salicylates which we may give within the limits of safety.

So far, then, we may consider that on general principles two of the important symptoms of acute articular rheumatism are relieved.

On the other hand, there are certain complications, which are so frequent and occur so early that they may be considered as symptoms or a distinct part of the disease, in which salicylic acid probably effects but little, namely, the appearance of cardiac manifestations of the action of the rheumatic poison. Of course, it is true that salicylic acid, by shortening an attack of rheumatism, in that way indirectly protects the heart; but, at the same time, there is no evidence that it protects this organ from the actual presence of the disease process. In other words, it may prevent cardiac disease indirectly, but its administration in no way preserves the cardiac apparatus intact while the febrile symptoms last. This has been pointed out in a number of the standard works on medicine, and should be universally recognized by the profession, even though all its members may not be willing to admit that the statement is entirely true. Thus, in Stewart's article in the "System of Therapeutics," he points out that Hood, of London, in the treatment of twenty-two hundred cases of acute articular rheumatism appearing in both sexes under thirty-six years of age, noticed that there were a very large number of instances in which cardiac disease was produced. Thus, of eight hundred and twenty-eight cases treated without salicylates, five hundred had cardiac disease, whereas in three hundred and twenty-eight cases treated with salicylates, one hundred and ninety had cardiac disease; or again, of three hundred and sixty cases treated with salicylates, two hundred and forty-one had complications, and in another series three hundred and sixteen suffered from cardiac disease out of a total of five hundred and fifteen. In other words, in all cases treated by salicylates the aggregate of cardiac complications was somewhat over sixty per cent., while those who were treated by other measures had cardiac complications in a little less than sixty per cent. It is, therefore, evident that the salicylic compounds are no more affective in avoiding these unfortunate manifestations of the rheumatic poison than are the various other modes of treatment. This point is emphasized, too, by the fact that the percentage of cardiac disease in cases treated by the salicylates is about the general percentage of cases, namely, between fifty and sixty per cent. It is also true that relapses seem to occur more frequently under the salicylates than under the older methods of treatment; perhaps because, when the older methods are used, the dis-

ease runs its course, or, as it were, exhausts itself, whereas the salicylates may alter its course before the system is thoroughly rid of the rheumatic poison.

To quote Stewart again: "Garrett has shown that the salicylates seem to have more effect upon the hyperemic group of symptoms, as, for example, those manifested about a joint, than upon the fibrous symptoms, as, for example, those seen in endocarditis."

There are other points which might be discussed in regard to the value of salicylic acid in rheumatism, but these are, after all, the most important. In view of the recent studies of Haig and those of other investigators who have not been so thorough in their methods of research, we cannot doubt that this class of compounds, uniting with the uric acid, produce salicyluric acid, which is readily eliminated, and so directly or indirectly result in the amelioration of the rheumatic symptoms.

It is hardly in place to consider the disadvantages which salicylates possess, so far as their untoward symptoms are concerned. That they are capable of producing disagreeable symptoms everyone knows, but they probably do not cause difficulties to arise any more frequently than other drugs possessing medicinal power of great value. There are instances of very severe symptoms, but after all, these have been few and far between. Perhaps the most noteworthy of these are the ones reported within the last few years in the *London Practitioner*, where the use of what might be called a very moderate dose of the salicylates produced petechial eruption and retinal hemorrhages, which latter resulted not only in temporary but permanent blindness.

There are but two points in regard to the use of salicylates in rheumatism which, we think, should be particularly emphasized, and these are, (1) that the physician, after once deciding to administer these remedies, should give them in large doses or not at all, that is, to use no less than forty to eighty grains a day; (2) that if, after administering the drugs in this way, no amelioration of the symptoms of any note has occurred at the end of four or five days, that it is useless to continue this line of treatment, as little good will be exercised over the rheumatic process, and much harm will be done by saturating the patient with such irritants to the kidneys and stomach as are the class of the salicylates.—*Therapeutic Gazette.*

DIFFERENTIAL DIAGNOSIS AND TREATMENT OF CHRONIC EAR DISEASE.

Mr. Marmaduke Shield, writing on cholesteatoma of the mastoid cells, remarks that the pathology of these tumors, or rather accumulations, seems rather confused. They are considered as neoplasms by some; by others as originating in desquamating epithelium; and by a few as concentric masses of inflammatory *dêbris*, containing cholesterine and amorphous material with fat globules and fragmentary cells. The unyielding nature of the confining walls largely determines the shape and consistence of these masses. It is especially necessary in the ear not to confound these growths with dermoid cysts. A dermoid cyst has a distinct capsule and usually contains hairs; a cholesteatomatous formation is merely bounded by condensed laminæ and contains caseating *dèbris*. The true cholesteatoma of the mastoid is not a neoplasm in the strict sense of the word, but is due to the accumulation of many generations of squamous epithelial cells, which are successively shed. The epithelium grows into the mastoid antrum or cells from the auditory canal or tympanum through an opening previously caused by carious and necrotic processes. The symptoms occasioned by such tumors are largely those of chronic mastoid disease, and exploration will detect their true nature. After free excision, efficient drainage of the resulting cavity is best carried out by removing the overlying bone far more thoroughly than is generally done. Soaking with alkalies or pancreatic liquor, followed by the use of the intra-tympanic syringe, is a useful

treatment for accumulations of this kind. These points are well illustrated by the following case: An anæmic young woman, whose early history was obscure, was admitted into Charing Cross Hospital for right facial paralysis, associated with suppurative middle ear disease, and apparently dependent upon it. The patient was extremely ill, drowsy and stupid. A scanty but fœtid discharge flowed from the right ear. The patient had suffered from ear disease since childhood, and had had a previous attack of facial paralysis which had passed off. She was quite deaf on the affected side, even to loud conversation, but the tuning fork could be long heard on the mastoid and the watch on contact. Her principal trouble was persistent headache. The right facial muscles failed to respond to faradism. On examination it was found that there was partial destruction of the membrane with granulations. A small discharging sinus existed behind the ear. The mastoid fistula was explored under ether. It just admitted a fine probe. Mr. Shield enlarged the opening, and a small spoon was passed into a cavity of considerable size, full of firm caseating offensive material, composed of *dèbris* and large flat cells with a quantity of cholesterine. Pulsation could readily be detected against the spoon, as though the cavity were bounded by the dura mater. Iodoform emulsion was injected, and freely escaped through the meatus. A full sized tube was introduced and the parts daily syringed with a solution of peroxide of hydrogen, with the most marked relief to the "head symptoms." Subsequently a more extensive operation was deemed advisable to obviate a persistent sinus. Mr. Shield exposed the mastoid region, and, taking the sinus as center, with mallet and gouge removed the outer shell of the large cavity. Working layer by layer, he opened a considerable cavity, which seemed to include the whole mastoid; and concentrically arranged layers of tough cheesy material were detached by scoops. When this had all been removed there remained a smooth-walled cavity the size of a walnut. There was a total absence of signs of caries. When the patient was eventually sent to a convalescent home the hearing for conversation was good, and her general health and intelligence markedly better.—*The London Lancet.*

Diseases of the Spleen and their Importance.*

Dando, of Milano, 1893, had made a collection of statistics of extirpation of the spleen, numbering 102, with forty-six recoveries and fifty-six deaths. The number of deaths chiefly followed in cases of leukæmic spleen. In a collection of twenty-five cases death followed promptly. The results of extirpation in simple hypertrophy are also unfavorable; eighteen operations with eleven deaths. In the cases of splenic malaria, eleven deaths in twenty-three operations. The results of operation for floating spleen are usually favorable; seventeen operations with two deaths. The remaining nineteen operations were cases of abscess of the spleen, plain cysts, echinococcus, amyloid, sarcoma, lympho-sarcoma, obstruction of the spleen, making in all seven deaths.

In connection with this paper the author has removed the doubts raised against the extirpation of the spleen by Zoccariello and Fioraranti in the year 1549.

Prickly Heat.

Dr. Pollitzer finds that in prickly heat the horny layer of the epidermis is swollen by imbibition of water, the rete Malpighii slighly œdematous and containing cystically dilated sweat ducts, the blood-vessels of the papillary layer gorged. His view of the etiology of prickly heat is that it develops on a skin soaked in perspiration and insufficiently supplied with fat. He recommends patients suffering from it in summer in hot climates to anoint the regions usually affected with a fat after the morning bath, the fat he advises being lanoline with the addition of a little almond oil. — *Jour. of Cut. and Gen.-Urin. Dis.*

A Nervine Tonic in Pill Form.

℞

Ferri Phosphatis	gr. i.
Strychninæ	gr. 1-32.
Quininæ Sulphatis	gr. i.
Acidi Phosphorici Concentrati	m iss.
Radicis Glycyrrhizæ Pulv. ad	gr. v.

Misce et fiat pilula.
One pill to be taken three times a day.

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*A lecture read before the Society of Wissenschaftlitche Heil in Konigsburg i. Pr. Translated by M. B WERNER, M. D.

CURRENT LITERATURE REVIEWED.

THE ANNALS OF OPHTHALMOLOGY AND OTOLOGY

for April, commences with a paper by Charles Stedman Bull, M. D., on

Gonorrhœal Irido-choroiditis

With a report of two cases. The same line of treatment was pursued in both cases. "Ten grains of sodium salicylate were given every hour for nearly three days when signs of gastric irritation compelled the discontinuance of the drug. Hot fomentations were applied continuously to the eyes and a mixture of atropine and cocaine was instilled every two hours and three leeches applied to the temple. After an interval of twenty-four hours, potassium iodide in twenty grain doses was administered three times a day, combined with twenty grains of the bisulphate of quinine." Under this treatment the pain in the eye was rapidly relieved but as the potash soon disturbed the stomach it was discontinued. The local treatment was continued and a cure effected by giving salicylate of cinchonidia five grains every hour, which was well borne by the patient. Dr. Bull remarks that the disappearance of the iritis under appropriate treatment without leaving posterior synechiæ proves the absence of the plastic character. Its prompt disappearance distinguishes it also from the usual forms of serous iritis.

Dr. Charles W. Kollock of Charleston, S. C., contributes a very interesting paper on

The Eye of the Negro

He states that the eye of the negro is not so good as before the war. During the days of slavery the master engaged the best medical talent for his protection and every case was taken to preserve him in the best of health. But with the war came many troubles, many negroes were sent to work upon the fortifications which were constructed along the coast, troops from both armies camped in their midst and syphilis having thus a comparatively new field spread as fire on the prairie, carrying every thing before it, so that now it is scarcely an exaggeration to say that when you see a negro, you see a case of syphilis. "A careful inquiry among the older physicians proves that before the war these people had little or no eye trouble beyond cataract, that ulceration of the cornea, which now numbers its victims by the thousand, was almost unknown, and it is certainly very rare that nebulous cornea, iritic adhesions and eyes lost from ophthalmia neonatorum are seen among the older and ex-slaves, while among the younger, the post-bellum negro, such cases are not only of daily occurrence but steadily increasing." This is partially the "diseased condition of the people, who being now thoroughly syphilized, possess all the dyscrasias that may follow such a condition and present a most fertile soil for all ulcerating and wasting diseases. Not entirely to syphilis can all this be laid, but to their manner of living, poorly housed and clothed, and ill nourished. Parents are utterly indifferent to the condition of their children, allowing them to go months without treatment, or perhaps using the filthiest of domestic remedies. Blindness, or greatly inpaired vision, is seen on all sides from this cause, and the outlook is truly discouraging. Trachoma is comparatively rare among them, but so it is among the whites of Charleston and throughout South Carolina." Iritis is of very common occurence. Cataract is quite as frequently seen in the negro as the white. Retinitis, optic neuritis, and choroiditis are not infrequently seen in the eye of the negro, but retinitis pigmentosa has not been observed in the pure blood black. Xerosis conjunctivæ is in Charleston and vicinity, a condition peculiar to the negro, and especially the children, and as yet not a case has been observed among the whites. In many cases tonic treatment and good food will bring about a cure, while in others nothing seems to improve.

Referring to the refraction of the eye of the negro, the writer states that "he has never seen but three cases of myopia in the black negro, and though they were black in color, still the features indicated mixed blood, therefore in the pure-blooded negro he has never seen a case of true myopia." But a comparatively small number of pure bloods have been examined for refractive errors when their eyes were under the influence of a mydriatic. The vision has however been almost invariably tested, and in the great majority of cases was found to be normal unless some haziness of the media existed; and the ophthalmoscopic examination confirmed the fact that but few varied from the normal or emmetropic eye. Among the mulattoes a very different state of affairs exists.

The eyes of sixty negroes, blacks and mulattoes, have been recently examined, whilst under the influence of a mydriatic, for refractive errors; of the sixty examined eleven were black and forty-nine were mulattoes. Of the eleven blacks six were males. Four of the black men were emmetropic. Three of the black women were emmetropic, one was hypermetropic, and one had myopic astigmatism, Of the forty-nine mulattoes, seven were men and forty-two women; of the seven men four were hyperopic, three myopic. Of the forty-two mulatto women, one was emmetropic, twenty-one were hyperopic, seven myopic; eleven had hyperopic astigmatism and myopic astigmatism. The author concludes by saying "Undoubtly the eye of the negro is failing from three causes, viz.: Civilization, syphilis and education."

This paper is followed by one on

Reflex Ocular Disturbance from Irritation of the Genital Organs.

by Edward B. Patterson, A. M., M. D. of Michigamme, Michigan

Dr. John Dunn of Richmond, Va., reports one case and Dr. Howard McIlvain Morton, of Minneapolis, Minn., reports two cases of "Keratitis Dendritica." In Dr. Dunn's case more decided improvement was effected by the galvanic current applied to the closed lids than by any other treatment. In the cases treated by Dr. Morton aristol was dusted on the ulcers, and a solution of atropine and eserine was instillated. A satisfactory cure resulted from these applications.

THE ANNALS OF GYNECOLOGY AND PÆDRIATRY.

for August. Dr. M. Rosenwassar contributes a paper on

What are the Indications for Abdominal Section in Intra-pelvic Hemorrhage?

The author comes to the following conclusions:

1. Intra-pelvic hemorrhage may be free into the peritoneal cavity, or primarily or secondarily circumscribed by true or false membranes.
2. Though nearly always due to ruptured ectopic pregnancy, the same surgical principles underlying the treatment of other similar hemorrhages are applicable in intra-pelvic hemorrhage.
3. Such treatment must, however, vary accordingly to the conditions, dependent primarily on the hemorrhage, and secondarily on the original cause of the hemorrhage; hence,
4. To prevent free intra-pelvic hemorrhage, abdominal section is indicated in all cases of presumably recognized, unruptured tubal pregnancy, either as a prophylactic, or for the purpose of removing pathological conditions not otherwise curable.
5. In all cases of free intra-pelvic hemorrhage, from whatever cause, early or immediate section is the only safe means of averting a fatal termination.
6. In circumscribed intra-pelvic hemorrhage, section is indicated for removal of increasing blood clot and debris, whether it be due to recurrent bleeding or continued growth of fœtus.
7. In circumscribed intra-pelvic hemorrhage section is necessary whenever the symptoms indicate decomposition of the blood clot.
8. Lastly, section is also indicated whenever the pressure of the circumscribed blood mass produces obstruction of the bowel.

Appended to the paper is the table of sixteen operations performed for intra-pelvic hemorrhage.

Dr. Wallace A. Briggs contributes a paper on

The Obstetric Forceps.

The indictment he brings against the ordinary obstetric forceps is, that its use demands an extravagant expenditure of force and attention with correspondingly diminished reserve and control. He proposes a modification of the present form in which the handles are shaped like that of a shovel and are detachable from the shaft, fitting two pairs of blades, long and short, and of an axis traction attachment in the form of a straight bar projecting at a right angle downwards from the main handles. The handles are made detachable for the purpose of facilitating the crossing of the blades and perhaps at times the introduction of the blades. The author states that these forceps have stood the test of practice. The points of superiority claimed for this instrument are: firm and comfortable grasp; economy in the expenditure of force and exactitude in its application; reserve force and consequent control.

Uretero-vaginal Fistula following Vaginal Hysterectomy for Cancer of the Uterus.

is discussed by Dr. L. H. Dunning. After reviewing the literature of the subject, the author presents the following conclusions:

1. Injury of the ureter during vaginal hysterectomy is liable to occur in the practice of skillful operators.
2. It is more likely to occur when there is broad ligament infiltration, or when there has been parametric inflammation, with adhesions.
3. Whether the use of forceps and clamps more frequently results in such injury and fistula than when ligatures are employed has not been determined, but such is probable.
4. In the five new cases the injury did not seem to have an unfavorable influence upon the immediate recovery of the patient. More observations are needed upon this point.
5. In cases of resulting ureteral fistula, disease of the corresponding kidney is prone sooner or later to appear, whether the fistulous opening be into the vagina or upon the surface of the body.
6. Operations for the closure of uretero-vaginal fistula, so that the urine will have an unobstructed and uninterrupted flow in the bladder, should in proper case be employed.
7. The operations of Parvin, Simon, Bandl, Landau and Gerde have this end in view, and should be employed in suitable cases if the kidney is healthy.
8. Kolpokleisis, either partial or complete, leaves an artificial receptacle for the urine walled in by tissue, in which we fear the speedy return of cancer, hence is of doubtful utility.
9. Nephrectomy is a justifiable precedure in uretero-vaginal fistula when there is obstruction to a free flow of the urine into the vagina that cannot be overcome by dilatation of the fistulous opening, in case of failure of plastic operation and when the corresponding kidney is markedly diseased.

Salpingitis and Pelvic Adhesions

is the title of a paper by Dr. H. G. Wetherill, in which the following conclusions are reached by the author.

1. Tubal and ovarian inflammations are usually associated; the one rarely being present without the other.
2. This tubo-ovaritis is nearly always the extension of a specific or septic inflammation along the mucous membrane, or through the lymphatic vessels.
3. That this implies an unclean vagina or uterine canal (in the modern surgical sense),

or that hands or instruments introduced into the genital tract have carried infection to it.

4. Abrasions and lacerations of the mucous membrane greatly increase the risk of tubo-ovaritis by lymphatic extension and by the facility offered for the growth of bacteria, and the difficulty of sterilizing wounds in such a situation.

5. Surgical cleanliness of all vaginal and uterine manipulations is imperative as a prophylactic measure. Labor at term and abortions must be followed by rigid antisepsis. Lacerations should be approximated at once when possible and abrasions kept perfectly clean.

6. Adhesions about an inflamed tube and ovary are conservative in design and effect, and should not be disturbed till the disease back of them is removed.

7. When the disease is removed the adhesions tend to absorption and usually disappear in time.

8. Septic infection is a more potent factor in causing adhesions than simple aseptic traumatism, and the adhesions following slight injury to the healthy peritoneum are due to mild infection, which may have taken place at the same time.

Dr. J. S. Hammond contributes a paper on "Puerperal Eclampsia" advocating the use of veratrum viride in doses of thirty to forty drops of Norwood's tincture hyperdermically.

Dr. Alexander J. C. Skene discusses the "Pathology and Treatment of Injuries of the Pelvic Floor." A review of his paper will be found in THE MEDICAL AND SURGICAL REPORTER for August 19, 1893, page 306.

The remaining papers in the issue are: "Catheterization of the Ureters," by Dr. Howard A. Kelly; "Dilatation of the Cervix for Dysmenorrhœa," by Dr. Edmund M. Pond; and, in the Pædiatric Department, an interesting paper by Dr. William D. Wirt on the "Conservative Treatment of Joint Diseases."

PERISCOPE.

MEDICINE.

Th Forms of Diabetes.

Dr. George Harley gives the following classification of diabetes:

1. Hepatic diabetes—including the gouty variety.
2. Cerebral diabetes—including all cases of saccharine urine arising from nerve derangements.
3. Pancreatic diabetes—the most deadly form of the disease.
4. Hereditary diabetes—a form by no means uncommon, and one, too, where both brothers and sisters may labor under the disease without either their maternal or paternal parent having been effected by diabetes, though more distant members of the family may have suffered from it.
5. Food diabetes—including all forms of saccharine urine arising from the ingestion of unwholesome substances.

In the matter of treatment, besides diet and opium or codeine, Dr. Harley recommends croton chloral, strychnine, phosphoric acid for thirst, and an absolute prohibition of alcohol—*Med. Record.*

Hot Water in the Treatment of Corneal Affections.

Dr. J. A. Lippincott (*Ophthalmic Review*) recommends the repeated instillation of water at a temperature of about 150° F., applied directly drop by drop, to the affected area in obstinate corneal ulcers and in suppuration after corneal wounds. He details one case in which this method was very effectual, and refers to others in which he has been satisfied with its results. He advises that the water be heated in a test tube, or some other vessel, in order to secure a certain temperature, and then transferred by means of a dropper and applied as before described.

Gastric Ulcers and the Consequent Symptoms of Irritation.

Prof. Wilhelm Fleiner (*Munchener med. Wochenschrift*) writes concerning the results of injections of large quantities of bismuth subnitrate through the stomach-tube in case of ulcer, and the various painful or intolerant conditions of the stomach arising from ulcer or cancer. The indications are:

1. In all sensitory, motor or secretory signs of irritation of the stomach in which simple lavage is not sufficient, as in old ulcers, ulcerating carcinoma or hemorrhagic erosions.
2. As a specific remedy in gastric or duodenal ulcer.

The bismuth is to be used daily at first, then with decreasing frequency. The dose is 150 to 200 grains suspended in lukewarm water. When the stomach-tube cannot be used, the same may be drunk from a tumbler. It is contradicted where there is much decrease of HCl, except in ulcerating cancer and hemorrhagic erosions.—*Lancet Clinic, Cincinnati.*

Vaseline in Certain Affections of the Middle Ear.

Dr. Delstanche (*Le Bulletin Medical*, No. 8, 1893) speaks highly of injections of liquid vaseline in adhesive affections of the ear. He injects it through the Eustachian tube into

the tympanic cavity. It is perfectly innocuous, and from an experience extending over several years he finds it of value:

1. To rupture extensive adhesions of the tympanic membrane with the wall of the labryinth where insufflation of air, etc., are found insufficient. He has had several cases of partial success with forced injections of the liquid vaseline.

2. To clear out mucous accumulations from the tympanum during the course of certain chronic catarrhs. It forces the mucus into the mastoid cells, where it no longer interferes with hearing, or into the pharynx.

3. To diminish the chances of inflammatory reaction after paracentesis of the tympanum, where the matter filling the tympanum is dense or viscid, and will not evacuate itself spontaneously in a satisfactory manner. Here, from its innocu ity, it is to be preferred to any other liquid.

4. To open an obstructed Eustachian tube when mucus blocks it and prevents insufflation of air, a few drops of vaseline blown through the catheter will clear it at once. Hence this simple means is always to be tried before dilatation with sounds is attempted.

5. Finally, in acute inflammation of the middle ear, either with or without perforation, especially in purulent otitis complicating influenza, massive injections of liquid vaseline saturated with iodoform render signal service, from their sedative action upon the atrocious pains which often accompany this affection. They also appear to hasten and aid to a favorable termination.

Pilocarpine in Elephantiasis.

Dr. Poulet (*Med. Neuigkeiten*, No. 7, 1893), in a case of elephantiasis involving one leg, obtained a lasting and considerable decrease in size of the member by subcutaneous daily injections into the limb of 1 to 2 dgm. doses of pilocarpine. This treatment was continued through several months.—*Pritchard.*

Phenacetin Poisoning.

The following case, illustrating some effects of phenacetin, is of interest in view of the rapidly extending use of this drug among the general public; it is recorded by Eisenhart. A strong and healthy man, thirty-two years of age, was given for neuralgia proceeding from a carious tooth antifebrin in doses of about seven grains, with no result except the appearance of a swelling about the size of a hazel nut on the jaw. Phenacetin was then given in two doses of fifteen grains each in the morning and in the evening with two hours' interval. The effect was satisfactory: not only did the pain in the branches of the fifth nerve disappear after the second powder, but the swelling became less, only some dull pain in the tooth remaining. To remove this, the patient took on the following evening three powders—one at five o'clock, the second at 6.30, and the third about eight, shortly before supper. About nine o'clock he was seized with palpitation, increase of the action of the heart, and a certain oppression of breathing, more especially in speaking. These symptoms remained without variation for half an hour, when they suddenly increased: the oppression became more intense, palpitation rapidly got worse, deafness was manifest, and evanescent hot flushing with outbreak of perspiration, sickness and vomiting. With the sickness every trace of poisoning passed away entirely, and the patient felt quite well.—*Therap. Monat.*

Some Drawbacks of Borax in Epilepsy.

Now that borax is so much employed in the treatment of epilepsy it is well to remember that, when it has been long continued, it causes, as noted by M. Lemoine Georges of Lille, a peculiar disease of the gums like that seen after lead. Diarrhœa and skin eruptions are also mentioned by Dr. Gowers as disagreeable and not infrequent effects. It is desirable to begin with small doses, such as fifteen grains daily.—*Med. Chron.*

Crying in Children.

The cry of children, according to Dr. E. C. Hills in pneumoina and capillary bronchitis is moderate and peevish and muffled, as if the door were shut between child and hearer. The cry of croup is hoarse, brassy and metallic, with a crowd inspiration. That of cerebral disease, particularly hydrocephalus, is short, sharp, shrill and solitary. Marasmus and tubecular peritonitis are manifested by moaning and wailing. Obstinate, passionate, and along-continued crying tells of earache, thirst, hunger, orginal meanness, or the pricking of a pin. The pleuritic is louder and shriller than the pneumonic, and is evoked by moving the child or on coughing. The cry of intestinal ailments is often accompanied by wriggling and writhing before defecation. Exhaustion is manifested with a whine. Crying only, or just after coughing, indicates pain caused by the act. The return or inspiratory part of the cry grows weaker toward the fatal end of all diseases, and the absence of crying during disease is often of graver import than its presence, showing complet exhaustion and loss of power. Loud screaming sometimes tells of renal gravel.—*Ontario Med. Journal.*

The Treatment of Hemorrhoids by Electricity.

Bacon employs the following methods, which in all of his cases caused a decided decrease in the tumors, without secondary hemorrhage, sloughing or after-pains. He makes use of an instrument consisting of a long pair of forceps, similar to urethral forceps insulated with vulcanized rubber, except at a place one-half an inch in length on the face of the blades. By means of a binding screw the forceps can be connected with the positive pole of a battery. The hemorrhoid is seized with the forceps in such a manner as to have the exposed metal of the blades clasp it at its base. The negative pole is connected with a disk or needle-holder, pre-

ferably one containing four needles. After grasping the hemorrhoid with the forceps, a few drops of a 4 per cent, solution of cocaine are injected into the tumor. The needles are then pushed into the center of the tumor, and a current of from five to ten milliamperes turned on. Immediately there will be noticed an escape of hydrogen about the needles, and a decided blanching of the pile. The current should be kept on until the tumor becomes a whitish gray, usually requiring from two to five minutes of time.

There are some points necessary to observe in using eloctrolysis in this class of cases: Thoroughly empty the colon before operating. Disinfect the tumor before introducing the needle. Never use this method in acutely inflamed hemorrhoids. The needles should be boiled before using.—*Univ. Med. Mag.*

Transfusion of Nervous Tissue in Neurasthenia.

To the French Academy of Medicine M. Constantin Paul reports the results of the treatment of sixty-one cases of neurasthenia by the injection of the grey substance of the cortex of the sheep diluted with water. In fifteen cares there have been no results; in forty-six there has been more or less success. Of these fifteen cases eight had not given the treatment a long enough trial; four were hypochondriacs who are very little amenable to any treatment. There had been sucess in some cerebro-spinal cases, in one spinal case, in some cases of impotence, in some of chlorosis, in some of neurasthenia at change of life, in some in old age, and in other cases during chronic uterine disease. There had been improvement in sleep, in mental activity, and in cardiac strength. In the commonest cerebro-spinal forms the general plan of treatment had been to give twenty injections during eight or ten weeks.—*Le Progres Med.*

ARMY AND NAVY.

U. S. ARMY FROM AUGUST 13, 1893, TO AUGUST 19, 1893.

Leave of absence for one month, to commence about September 1st, 1893, is granted Captain M. W. Food, Assistant Surgeon U. S. Army.

By direction of the President the retirement from active service this date, by operation of law, of Lieutenant Colonel John H. Janeway, deputy surgeon general, under the provisions of the act of Congress approved June 30, 1882, is announced.

Leave of absence for one month, to take effect when relieved by another medical officer, is granted First Lieutenant Harlan E. Mc Vay, assistant surgeon, San Carlos, A. T., with permission to apply for an extension of fifteen (15) days.

Major Henry R. Tilton, surgeon U. S. Army, is granted two (2) months leave of absence, when relieved from duty at Fort Wayne, Michigan.

U. S. MARINE HOSPITAL SERVICE FOR THE EIGHT WEEKS ENDED AUGUST 5, 1893.

Fessenden, C. S. D., Surgeon, to proceed to Mobile. Ala., for duty June 16, 1893. To proceed to New Orleans, La., as Inspector, Aug. 1, 1893.

Murray, R. D., Surgeon, granted leave of absence for seven days, June 21, 1893.

Vansant, John, Surgeon, to proceed to Wilmington, N. C., for duty June 16, 1893.

Austin, H. W., Surgeon, to inspect Delaware Breakwater Quarantine Station, July 22, 1893.

Gassaway. J. M., Surgeon, to proceed to Detroit, Mich., and Chicago, Ill., as Inspector, July 12th, 1893.

Irwin, Fairfax, Surgeon, detailed for duty in Office of the U. S. Consul, London, England, July 2nd, 1893.

Carter, H. R., Surgeon, to proceed to Brunswick, Georgia, for temporary duty. June 28th, 1893.

Peckham, C. T., Passed Asst. Surgeon, granted leave of absence for six days, June 22, 1893.

Brooks, S. D., Passed Asst. Surgeon, granted leave of absence for three days, June 22, 1893.

Carrington P. M., Passed Asst. Surgeon, detailed for duty in office of U. S. Consul, Bremen, Germany, June 15th, 1893.

Kinyoun, J. J., Passed Asst. Surgeon, to rejoin Station, Washington, D. C., July 10th, 1893. To inspect Camp Low, New Jersey, July 29th, 1893.

Goodwin, H. T., Passed Assistant Surgeon, granted leave of absence for three days, June 12th, 1893. To proceed to Louisville, Ky., for duty, July 12th, 1893.

Vaughan, G. T., Passed Asst. Surgeon, to proceed to Chicago, Ill., for temporay duty, July 10th, 1893.

Geddings, H. D., Passed Asst. Surgeon, to proceed to Delaware Breakwater Quarantine for duty, June 30th, 1893.

Perry, J. C., Passed Asst. Surgeon, to proceed to Portland, Me., for temporary duty, July 8. 1893.

Stimpson, W. G., Asst. Surgeon, detailed for duty in Office U. S. Consul, Glasgow, Scotland, July 7th, 1893.

Gardner, C. H., Asst. Surgeon, granted leave of absence for fourteen days, July 19th, 1893.

Strayer, Edgar, Asst. Surgeon, to proceed to Vineyard Haven, Mass., for temporary duty, July 8, 1893.

Oakley, J. H., Asst. Surgeon, to proceed to Wilmington, N. C., for temporary duty, June 24th, 1893.

Norman, Seaton, Asst. Surgeon, granted leave of absence for three days, July 24, 1893.

Branham, J. W., Asst. Surgeon, to proceed to Brunswick, Ga., for temporary duty, July 25, 1893.

Sprague, E. K., Asst. Surgeon, granted leave of absence for fifteen days, July 22nd, 1893.

Prochazka, Emil, Asst. Surgeon, relieved from duty at Ellis Island, N. Y., and ordered to report to Medical Officer in command, New York, N. Y., July 29th, 1893.